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**The Role of Theory and Research in Clinical Practice.
An Investigation of Therapists' Perceptions of the
Scientist-Practitioner Model according to Stage of Professional
Development and Professional Allegiance**

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**Submitted in partial fulfilment of the requirements for the degree of
*DOCTORATE OF CLINICAL PSYCHOLOGY***

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DECLARATION

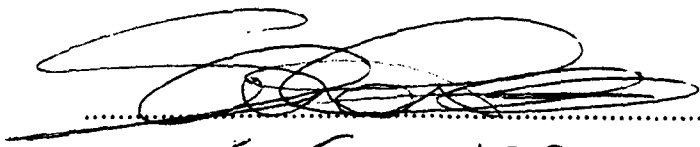
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STATEMENT 1

This thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

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Signed  (supervisor)

Date July 10th 1997

STATEMENT 2

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CONFIDENTIALITY

The information contained in this study has been written-up to preserve the anonymity of all those who took part. Any characteristics that could have potentially led to the identification of individuals have been omitted. In cases where participants' background characteristics are described, it should be noted that some gender descriptions have been changed.

ABSTRACT

The scientist-practitioner model has been widely espoused as the optimum model of professional training and practice for clinical psychologists and increasingly, the related professions of counselling psychology and counselling. However, it has also proved to be contentious regarding the extent to which it reflects or informs the realities of professional practice. This debate has taken on a new meaning in the current health care climate with the increasing emphasis on using research to achieve 'evidence-based practice'. This study explores clinical psychologists', counselling psychologists' and counsellors' beliefs about the scientist-practitioner model. Key themes relevant to this, and the related areas of theory, research and clinical formulation, were identified through in-depth, qualitative interviews and then tested further by using a survey instrument devised to reflect these themes. The results suggested differences between the professional groups in beliefs about research and the scientist-practitioner model and also indicated the influence of work setting. Differences in idiosyncratic definition of the scientist-practitioner model also emerged, which appeared to be related to beliefs about its value. Implications for training and professional practice are discussed and the contribution of the study to the existing literature and wider debate are reviewed.

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1.0 INTRODUCTION

The scientist-practitioner model has historically been the most widely espoused model of clinical psychology training and professional practice (Barlow, Hayes and Nelson, 1984). However, despite official endorsement, it has also been the source of much debate (e.g. Albee, 1970; Barlow, 1981). As Pilgrim and Treacher (1992) suggest, this represents part of a wider discussion about the defining characteristics of clinical psychology. In particular, radical changes to the organisation of the National Health Service (NHS) and clinical psychologists' work within it have given rise to questions of identity and role as psychologists have had to adapt to a professional climate increasingly concerned with cost-effectiveness, accountability and competition with other mental health professions. In order to examine the extent to which the scientist-practitioner model is useful to retain in the context of these changes, it is first necessary to understand its origins in terms of the professional and political climate that gave rise to its inauguration.

1.1 The origins of the scientist-practitioner model: a brief history

The marriage of clinical practice to scientific psychology was celebrated at the conference held at Boulder, Colorado in 1949. Presented as the most appropriate framework for the training and professional practice of clinical psychologists (Raimy, 1950), the scientist-practitioner model advocated the importance of training psychologists to be equally skilled in research and therapeutic practice. This reflected the belief that psychologists should not only be contributors to scientific psychology but also that they should achieve a rigour in their therapeutic practice which was believed to characterise the discipline of academic psychology more generally. As a framework of accountability, the scientist-practitioner model was proposed to safeguard the public against poor practice and provide the profession with a clear identity and direction (Long and Hollin, 1997).

During the same period, psychologists in Britain were also attempting to establish clinical psychology as a viable profession. The British scientist-practitioner model

owes its status principally to the work of Eysenck who, as possibly the most influential proponent of the profession during the post-war period, occupied a privileged position at the Institute of Psychiatry at this time. However, in contrast to the American model which emphasised the need to combine research and therapeutic practice in the service of social need, Eysenck (1949) regarded the role of therapy as **"..essentially alien to the clinical psychologist"** (p.174). Interpreting the scientist-practitioner model in the light of rigorous empiricism, Eysenck argued that the profession should concern itself solely with research and diagnosis. As he argued:

" We must be careful not to let social need interfere with scientific requirements...Science must follow its course according to more germane arguments than the possibly erroneous conceptions of social need" (1949, p.173).

The emphasis on scientism was also endorsed by M.B. Shapiro (1955), another influential figure during this period. Appointed by Eysenck to run the clinical department at the Institute of Psychiatry, Shapiro developed Eysenck's vision of the clinical psychologist as diagnostician-researcher and emphasised the study of the single case and the experimental method in the pursuit of empirically-driven knowledge and later therapeutic work.

This dismissal of therapeutic practice as an inappropriate activity for the profession must be understood within the context of its time. Firstly, clinical psychology was emerging in a milieu dominated by the medical model which was both positivist and empirical in its foundations. Secondly, it was closely related to Eysenck's well-documented dislike of psychoanalysis, the then dominant model of professional practice.

Whilst his position may now appear misguided, it helped to secure clinical psychology as a scientific enterprise, which had political advantages (Lavender, 1996). By appealing to its scientific status, the profession could justify itself as a social institution and attract the prestige necessary for its survival. By emphasising

expertise in research design and diagnosis, Eysenck ensured that clinical psychology would have a unique role to play in post-war health care (John, 1984). However, his rejection of therapeutic practice ultimately proved problematic. The close relationship between clinical psychology and developments in the NHS more generally meant that the profession evolved more closely in accordance with NHS priorities than Eysenck had envisaged. As health care provision at this time principally required skilled practitioners, clinical psychologists became increasingly practice-oriented.

The acceptance of a therapeutic component into the British scientist-practitioner model was further eased by the advent of behaviour therapy, whose success in treating a range of mental health problems enabled clinical psychologists to embrace therapeutic practice without compromising their status as applied scientists (Lavender, 1996). However, as Pilgrim and Treacher (1992) observe, the development of the scientist-practitioner model left a legacy of underlying tension between research and practice which has implications for the training and practice of clinical psychologists today.

1.2 The controversy surrounding the scientist-practitioner model: questions of appropriateness and feasibility

Despite wide official endorsement, the scientist-practitioner model has been criticised as representing an ideal that is seldom fulfilled in practice (Barlow *et al.*, 1984). Relatively early in the debate, Pottharst (1973) argued that the model paid insufficient attention to how students were to achieve clinical competence. Rachman (1983) also warned of the potential danger of the "*..scientist..squeezing out the practitioner*" (p.xiii). This concern was echoed more recently by Sheehan (1994) who argued that the scientist-practitioner model fails to equip trainees with the skills necessary for good therapeutic practice.

The appropriateness of even trying to integrate research and practice within a single training model was also questioned. Frank (1984), for example, argued that the rationale for the Boulder model was spurious in that it attempts to train graduate psychologists in roles which are incongruent with their interests and abilities. This was endorsed by Holland (1986) who claimed that scientists and practitioners comprise different personality types who should not be moulded into a single monolithic training style.

Evidence for the apparent inadequacies of the scientist-practitioner model has come from a number of sources. It has been pointed out that clinical psychologists are unlikely to engage in research at post-qualification level (Head and Harmon, 1990) and that they typically rank research as a lower priority than other service-related commitments (Allen, 1985). This would appear to be endorsed by the repetitively quoted finding that the modal number of publications for clinical psychologists is zero (e.g. Norcross, Prochaska and Gallagher, 1989) and that clinical psychologists often regard the research literature as irrelevant to their therapeutic practice (Barlow *et al.*, 1984).

A particularly damning account has come from the recent work of Dawes (1994) whose critique of professional practice not only highlights the conflict between scientists and practitioners but extends the debate into the realm of professional responsibility. In an apparent confirmation of the minor role that the scientist-practitioner model plays in practice, Dawes argues that professional psychologists consistently fail to use the research evidence to inform their work, relying instead on unvalidated clinical experience and poor technical procedures (the Rorschach Ink Blot Test is targeted for particular criticism). Given that scientific knowledge about how to optimally treat mental health problems is incomplete, he argues that psychologists should restrict their work to areas where such knowledge exists.

Criticism of this nature is of concern to a profession that has achieved recognition partly through its stated commitment to clinical research. However, Dawes' conclusion that research does not typically influence practice may be overly-simplistic when seen within the wider professional context. Long and Hollin (1997) point out that in order to respond to social need, therapists will always be in a position where they have to innovate and work on accepted best practice, rather than relying on scientifically-proven methods.

This argument was raised previously by James (1994) who, drawing upon Kaminski's hierarchy of systems of knowledge (Kaminski, 1970; cited in Kanfer and Nay, 1982), proposed that whilst empirically-derived relationships are the ideal, theoretical knowledge enables the scientist-practitioner to make informed decisions when empirical data are lacking. Where theoretical knowledge is absent, practices established through shared professional beliefs and the common practice of peers represent valid alternatives. Similarly, the therapist's individual experience which stems from being part of a wider social community is also relevant when other forms of knowledge are unavailable. Based on this reasoning, the scientist-practitioner model could be reconstrued as providing a general set of principles for informing therapeutic practice, even when empirical data are lacking.

Furthermore, Stricker (1992) argues that the impact of research on therapeutic practice often represents an indirect 'meta-effect', whereby the research questions of one generation presage the clinical developments of the next. Stricker illustrates how the research questions about whether therapy 'works' and 'which one works best' during the 1950's and 1960's subsequently gave rise to new therapeutic techniques, as each school attempted to display its superiority. Similarly, the paradoxical status of equivalence amongst the different psychotherapies, established in the 1970's (Luborsky, Singer and Luborsky, 1975) led to new research questions to overcome uniformity which moved therapeutic practice towards a more specific,

prescriptive outlook. This suggests that research findings have the power to impact upon therapeutic practice but in a more complex way than often appreciated.

1.3 The scientist-practitioner model revisited: evolving interpretations and multiple meanings

Despite its contentious nature, the scientist-practitioner model has retained its supporters. The field of professional psychology continues to grow and as a relative newcomer to the professional scene, counselling psychology has chosen largely to endorse the scientist-practitioner model rather than promote an alternative (Woolfe and Dryden, 1996). Furthermore, most training programmes in clinical psychology in Britain and many counselling programmes in the United States continue to operate along scientist-practitioner lines (Sprinthall, 1990; Vacc and Loesch, 1994). Whilst Pilgrim and Treacher (1992) argue that this represents a glossing over of the difficulties intrinsic to the model, continued support for the scientist-practitioner model raises the possibility that it embodies certain qualities that are deemed important to retain.

Belar and Perry (1992) have argued that the scientist-practitioner model provides an invaluable framework for theory-building, whereby random observations can lead to the development of new theoretical ideas and therapeutic interventions that can also enhance clinical science. Such a framework may have a particularly important function in the current professional climate. The fortunes of clinical psychologists and, increasingly, counselling psychologists and counsellors, are closely intertwined with the NHS whose own systems of health care delivery have undergone radical change recently. It has, therefore, been argued that there is a strong case for retaining the scientist-practitioner model as a framework for achieving optimum effectiveness at a time when professional activity is becoming more closely scrutinised (Hoshmand and Polkinghorne, 1992).

Moreover, Milne, Britton and Wilkinson (1990) have argued that much of the research which condemns the scientist-practitioner model has been based on survey methods which focus on a limited number of highly specific variables such as publishing scientific papers in refereed journals. However, they argue that when a wider definition of research is adopted which encompasses publishing in non-referenced journals and preparing service evaluation documentation, a closer approximation to the ideal begins to emerge.

By broadening the more traditional definition to encompass the interdependent dimensions of research consumption (reading research), utilisation (application of research findings) and motivational factors, clinical psychologists were shown to produce and incorporate research into their work to a significantly greater degree than previously assumed. However, this raises further questions. As Milne *et al.* point out, wider interpretations of the scientist-practitioner model lead to very different impressions of its characteristics and functions, suggesting that individual professionals may interpret the model to mean different things.

The need to acknowledge different interpretations has also been characterised in meta-theoretical terms. As Page (1996) argues, although the scientist-practitioner model was developed within a positivist framework, philosophies of science have subsequently evolved; the term 'science', therefore, represents a multifaceted approach to knowing rather than a single doctrine. Similarly, scientist-practitioners may organise their practice in legitimately different ways, according to the philosophy of science to which they adhere. Thus to refer to a single scientist-practitioner model without qualifying the associated philosophy of science from which it is drawn may obscure fundamentally different approaches to psychological practice.

Winter (1989) has also argued that the scientist-practitioner cannot simply rely on the research methods of conventional social science but must also incorporate more

reflexive, dialectical approaches. Relatively recent examples of these developments include the emergence of qualitative research methods (e.g. Reason & Rowan, 1981; Richardson, 1996) and a closer examination of more directly applicable quantitative research strategies such as individual case studies, service evaluation methods and group design for the practitioner who wishes to operate as a 'local clinical scientist' (Sturmey, 1991). This suggests that the scientist-practitioner model may be evolving to encompass a broader range of research-related activities.

The scientist-practitioner model may also serve another function that has typically been neglected in the academic debate. At the 1990 National Conference on Scientist-Practitioner Education and Training for the Professional Practice of Psychology, Abrahamson and Pearlman (1993) observed the consensus of opinion that the scientist-practitioner model was not a matter of activity or role but rather an internalised professional identity which carried with it a moral injunction to distinguish between sources of knowledge on the basis of their origins. This echoed the earlier statement by Singer (1980) who elevated the relationship between research and practice to a matter of ethics:

" ...The ethical practice of psychotherapy must reflect the current status of knowledge...The practitioner who has not examined recent developments in the research literature or who has not kept abreast of evaluation studies of various forms of treatment may well be violating a central ethic of the profession" (p.372).

Aspenson, Gersh, Perot, Galassi, Schroeder, Kerick, Bulger and Brooks (1993) also found this belief to be an important feature of psychology trainees' attitudes towards the scientist-practitioner model. In particular, they found that a distinctive feature of post-graduate clinical and counselling psychology students with positive attitudes towards the scientist-practitioner model was the belief that ethical and effective practice was dependent upon therapists keeping themselves informed about theoretical and empirical developments. Over time, these values appeared to be internalised suggesting that for some, the importance of retaining the model relates to beliefs and values about identity.

1.4 The relationship between theory and practice revisited: formulation as a framework for synergy

Alongside concerns about the relationship between research and practice, there has been considerable debate about the extent to which practitioners make use of theory in their work. As Barlow (1981) suggests, few procedures are practiced with theoretical purity and many therapists innovate with quite successful consequences. These more 'trial-and-error'-type ways of working may be partly responsible for what Goldfried (1980) describes as a growing trend towards greater commonalities in the practice of psychotherapy and a move towards theoretical integration (see Ryle's [1990] cognitive-analytic therapy as an example). However, developments such as these have led some to conclude that theory has little impact on practice.

In the field of social skills, Potter (1982) highlighted how a skilled social skills trainer drew exclusively on his experience of application, regarding the evolving theoretical literature as largely irrelevant to his work. In an attempt to make sense of the apparent schism between theory and practice, Potter thus concluded that theory and application represent different social contexts which accumulate separate histories and bodies of knowledge.

Attempts to understand the nature of these different social contexts have given rise to an exploration of the ways in which human beings engineer events for goal-directed activity. In the field of social psychology, consideration of the practical contexts in which interventions take place have led to greater consideration of intelligent improvisation in terms of managing and manipulating the necessary contingencies to achieve intended outcomes (e.g. Sternberg and Wagner, 1986; Suchman, 1987).

Whilst these developments highlight that all activities raise practical issues, it cannot be concluded that theory has little effect on therapeutic work. This can be understood by examining Schön's model of the reflective practitioner. Schön

(1983) argues that skilled professional practice requires the development of a tacit 'knowing-in-action' and that conscious application of theory and research is mediated through skilful judgements and performances which are subsequently reflected upon and refined.

As practice becomes more routine, 'knowing-in-action' becomes more spontaneous. However, this is potentially problematic because as Schön observes, the therapist may become selectively inattentive to phenomena that do not fit their existing knowing-in-action framework. This suggests that one potential function of theory and research could be to protect therapists against becoming overly enmeshed in their own reflective model. Furthermore, Schön's concept of the reflective practitioner may not be inconsistent with the scientist-practitioner model. As Long and Hollin (1997) point out, the scientist-practitioner continuously strives for a symbiosis between theory, research and their own practice. In this sense, the scientist-practitioner model may actually inform practice-related activities in proposing ways in which personal experience of practice can be structured and used.

The process of integrating theory, research and 'knowing-in-action' is typically defined in clinical psychology as formulation. As Crellin (1997) points out, the concept of formulation began to appear in clinical psychology texts in the 1950's as the profession developed its diagnostic and treatment-oriented roles and grew out of the desire to base therapeutic techniques on a foundation of empirically validated theories.

The term is now fundamental to the definition of the profession and has historically formed the basis of attempts to define the distinctive skills of clinical psychologists over other mental health professionals (Crellin, 1997). For example, the importance of formulation was recognised by the Manpower Planning Advisory Group (1990) who in publishing their commissioned report identified that whilst other professionals may use psychological skills and methods, the particular

contribution of the clinical psychologist was their ability to formulate a client's problems by integrating a range of theoretical ideas from their broad theoretical and empirical knowledge base. However, as Crellin points out, the fieldwork upon which these conclusions were based relied on an unquestioned acceptance of the role of formulation in clinical psychology and pre-determined assumptions about how it was defined.

This may be problematic, given that contemporary definitions of formulation may have evolved. cursory examination of clinical psychology training scheme handbooks suggests that the definition and function of formulation have developed over time. For example, Carter (1994) has defined formulation as a dynamic process which leads to a working hypothesis that is informed (but not exclusively determined) by theoretical and psychological evidence and which evolves in the light of new information accrued from the intervention itself. This is clearly distinct from the diagnostic model to which it originally related. It is possible then, that as with the scientist-practitioner model, the term formulation is interpreted in different ways, according to the training experience offered and the philosophy of science to which individual therapists adhere.

1.5 Professional practice in the NHS: a new role for research in the quest for evidence-based practice

Investigations into the scientist-practitioner model and formulation are not merely of academic interest but have substantial implications for the professional identity and functioning of clinical psychologists and increasingly, counselling psychologists and counsellors. As Walshe (1995) points out, the current emphasis on achieving therapeutic practice which is 'evidence-based' has moved decision-making away from opinion, experience and precedent towards use of research to guide choice of therapeutic intervention.

This development has caused the relationship between theory, research and practice to come under further scrutiny. One publication which reflects these changing priorities particularly clearly is the report entitled *NHS Psychotherapy Services in England* (Department of Health, 1996) which identifies that whilst many forms of therapy are practiced in the NHS, therapeutic techniques have often been used unsystematically. By investigating the range of psychological therapies used and collating the evidence on their effectiveness, the report aims to provide information that could assist the commissioning and provision of psychological therapies in a way that is 'evidence-based'.

This has potentially profound implications for therapeutic practice in the NHS. Whilst the report concludes that it would be premature to publish a list of 'effective' therapies, commissioners will nonetheless increasingly be basing their decisions about which therapies to purchase on research evidence and their interpretations of it (Guinan, 1994). As D.A. Shapiro (1996) suggests, whilst evidence-based practice has the potential to inform good patient care, it is also political, emphasising the underlying values of achievability and affordability. However, it is not easy to simultaneously demonstrate that therapeutic practice is both effective and economical which raises complex and emotive questions. For example, what is the status of approaches which are 'unvalidated' in evidence-based terms, such as psychodynamic and systemic models where outcomes are more difficult to measure (Blakey, 1996)?

Without an appropriate dialogue with purchasers about the nature of diverse therapeutic approaches and the research which comprises the outcome literature, psychologists and counsellors may find that their clinical decisions are increasingly dictated by purchasers' understanding of the research evidence. This indicates the need to look anew at the relationship between research and practice to ensure the future development of psychology and counselling professions in NHS settings. Within this context, the scientist-practitioner model may prove critically important.

1.6 Rationale for the current study

Whilst much has been written on the scientist-practitioner model, there have been few studies which address therapists' attitudes towards the model and how these attitudes change as therapists move from training into post-qualification experience. From a review of the literature, establishing the nature of professionals' attitudes would seem to be important, particularly at a time when services are grappling with the challenges posed by pursuing evidence-based practice.

The literature also suggests that individual therapists may interpret the scientist-practitioner model in different ways. As wider interpretations may lead to diverse impressions of its characteristics and functions, it is important to explore this further by investigating the nature and range of interpretations in current use.

A similar argument is proposed for examining therapists' attitudes towards formulation. The issue of formulation has typically been excluded from the debate about the scientist-practitioner model. However, as this is the unique skill that clinical psychologists purportedly possess, this area of skill requires investigation in its own right. It is also unclear whether formulation is a framework that other, closely allied professions such as counselling and counselling psychology regard themselves as possessing. An exploration of formulation would therefore be valuable in illuminating the subtleties of how theory and research are used in practice.

Finally, much of the literature which looks at perceptions of the scientist-practitioner model in the related professions of counselling and counselling psychology has been written about American and Australian therapists. However, it cannot be concluded that the results obtained from these studies automatically relate to British therapists. This would appear to be an important omission, given that counsellors and counselling psychologists are increasingly being employed in NHS settings and therefore working alongside each other and clinical psychologists in

increasingly collaborative ways. Whilst collaboration affords opportunities for sharing professional knowledge, there is also a danger of unhelpful competition based on a misunderstanding of other professions' skills and beliefs. Exploration of similarity and complementarity in attitudes towards the scientist-practitioner model and formulation specifically, and the integration of theory, research and practice more generally, could facilitate greater understanding of each others' perspectives and further develop cooperative working relationships.

1.7 Methodological choices: the case for a mixed method

Investigating practitioners' attitudes towards the scientist-practitioner model has been identified as a complex area (James, 1994). This relates both to the reflexivity of a researcher investigating a model of training and practice in which they have, themselves been trained (and thus investigating professions to which one is closely allied) and also to the emotive issues it can raise concerning professional identity and values. It could also be argued that there is an inherent paradox in using a scientific method to look at the scientist-practitioner model: a framework purported to be based on the very methods chosen to investigate it. This raised questions about what would constitute the most appropriate design for the current study.

On the basis of these issues, a mixed method was chosen, combining an in-depth qualitative methodology to elicit key themes and then quantitative analyses to enable broader conclusions on the basis of greater empirical rigour. It was anticipated that a mixed method would most adequately capture the complexity, diversity and reflexivity of the research topic and also permit a degree of generalisation beyond the immediate participant sample. The rationale for this is outlined further in the author's supplementary work sheet (Appendix 1) where epistemological and practical issues are addressed in greater detail.

1.8 Initial research questions

The overall aim of the study was to achieve a more detailed understanding of how psychologists and counsellors conceptualise the role of the scientist-practitioner model in their practice. In seeking to address this aim, the study was guided by five interrelated areas of enquiry:

1. How do therapists perceive the role of theory in their clinical practice and what are the factors that impact upon its perceived role in therapeutic work?
2. What are therapists' beliefs about the role of psychological research in the current professional climate?
3. Do different therapists interpret the scientist-practitioner model to mean different things and if so, do they recognise diversity of interpretation in others?
4. What are therapists' perceptions of the scientist-practitioner model in terms of its perceived functions and influence on their practice?
5. What are therapists' understanding of and beliefs about the value of clinical formulation as a strategy for integrating theory, research and practice?

An additional aim was to explore whether the results obtained were generalisable to the different professions on a larger scale. This was investigated through additional hypotheses which emerged from the qualitative analysis. Accordingly, the study is presented in such a way that reflects how it was conducted. The method and results of the qualitative, stage 1 of the study are presented first, ending with the hypotheses subsequently generated. This is followed by the method and results of stage 2, whereby the use of key themes is illustrated and the results of the statistical analyses used to test them are presented.

1.9 ETHICS APPROVAL

Ethical approval for the study was sought and obtained from the Salomons Centre Research Ethics Committee. A copy of the correspondence granting ethical approval can be found in Appendix 2.

STAGE 1

2.0 METHODOLOGY

2.1 Design

The design incorporated a qualitative research methodology whereby critical themes and constructs were elicited through use of an in-depth interview schedule.

2.2 Participants

Eight participants were recruited on an individual basis, comprising two clinical psychologists, two counselling psychologists, two counsellors and two clinical psychologists employed full-time in training. Selection was based on participants' knowledge of areas relevant to the study. Selection criteria therefore included positions of seniority within their chosen profession (for example, occupants of chair positions), literature they had published or the author's prior knowledge of their interest in an area directly relevant to the investigation. All eight individuals contacted subsequently agreed to participate. Each participant's professional characteristics are summarised below:

Participant 1: is female and identified her professional identity as a counsellor in primary care, working exclusively with adults. Her principal theoretical influences are psychodynamic and prior to her counselling training she had completed an art therapy training. Although her professional activities are predominantly therapeutic (NHS and private), she has also published in the field of psychotherapy. She was identified as a participant through the author's experience of being taught by her and her academic contributions to the field of psychotherapy.

Participant 2: is a male clinical psychologist who had qualified 16 years previously. His clinical work is in adult mental health and his additional professional responsibilities include supervising clinical psychologists and counsellors, service-related research and a number of management roles, including the management of a primary care service. His major theoretical and therapeutic

interests are psychodynamic. He was identified as a potential participant through his senior position on several committees and his close working relationship with clinical psychologists, counselling psychologists and counsellors.

Participant 3: is a female clinical psychologist who works full-time in training, having qualified nine years previously. Her specialty is adult mental health and she has a particular interest in systemic theory. She was identified as a potential participant through the author's knowledge of her role in training and through her publications on issues closely related to the present study.

Participant 4: is a counselling psychologist who had been practicing as a therapist for 14 years. Her professional work includes psychotherapy with adults in NHS, private and voluntary settings as well as being employed as a clinical and academic supervisor and consultant. Her therapeutic orientation is psychodynamic. She was identified as a participant through the author's previous academic contact with her and knowledge of her publications and reputation within the field of counselling psychology.

Participant 5: identified himself as a clinical psychologist, although he had trained as a counsellor prior to qualifying in clinical psychology six years previously. His main theoretical influences are psychodynamic within the context of offering psychotherapy to adults and he also supervises counsellors and trainees. He has a particular interest in philosophy, including the philosophy of science and had been recommended to the author by another psychologist with whom the author consulted in the early stages of the study.

Participant 6: is a counselling psychologist who had been qualified in this role for two years. His professional responsibilities include counselling practice with children and adults, research supervision and directorship of several professional bodies. He is also actively involved in the training of counselling psychologists.

He was identified as a potential participant through discussions with the author's research supervisor and through the position he occupied within the profession.

Participant 7: is a female clinical psychologist employed full-time in clinical psychology training. Her professional activities include regular supervision of trainees' academic and research enterprise and other professionals' clinical work. Her area of clinical expertise is in long-term mental health problems and her major theoretical influences are cognitive and psychodynamic. She was identified as a potential participant principally through the author's knowledge of her previous published work.

Participant 8: received an initial training in counselling and augmented his counselling skills through subsequently obtaining a master's degree in counselling psychology. He had been qualified for three years. His main therapeutic orientation is person-centred and he felt his practice and 'world-view' to be heavily influenced by humanistic philosophy. His area of clinical expertise is primary care and he also works with clients with learning disabilities in NHS settings. He was identified as a potential participant through the author attending a presentation on issues relevant to the study in which this participant adopted a key role.

2.3 Developing the interview schedule

The interview schedule (Appendix 3) was developed following an exploration of the available literature in the areas of (1) the relationship between theory and practice; (2) the scientist-practitioner model and (3) professional development. Early drafts were subsequently refined through on-going discussions with the author's research supervisor. A dialogue format was chosen in preference to a semi-structured interview as the author felt that this would better accommodate the reflexivity of the research process and facilitate a more collaborative exploration of issues that were significant to both the author and the participants.

Initial piloting of the interview schedule with a qualified clinical psychologist additional to the participant sample indicated that the interview felt appropriate and acceptable to the nature of the enquiry. Therefore, no subsequent alterations were made to the content of the interview. However, the pilot participant did recommend that each participant should be explicitly encouraged to decide how much information about themselves and their work to disclose, allowing participants to dictate which aspects of their experiences to share. This recommendation was subsequently implemented.

The principal themes of the interview schedule are outlined below:

A. Demographic features and background information

This section recorded information about participants' decision to enter professional training, the nature of their training, the length of time they had been qualified and any subsequent post-qualification training undertaken.

B. Personal perceptions of current work

Information was recorded on participants' current work including the range of their roles and activities and areas of enjoyment or dislike.

C. Experiences of professional training

This included clarifying what participants had initially found appealing about their profession, seminal experiences during the training experience and others' (peers' or supervisors') influence on participants' accessing of theoretical and research literature.

D. Role of theory and research in clinical work

Perceptions of the role of theory and research and its influence on participants' clinical work were discussed. This was explored further through participants providing specific examples of how they had applied theory or research findings to different clinical situations.

E. Formulation

Participants' views of the nature of formulation were addressed. This included exploring what they understood the term to mean and how they went about it, as well as how formulation skills evolved over time (such as, for example, through experience or further training). Where formulation was not a familiar term, participants were asked to discuss how they would attempt to 'make sense of' a presenting problem and any theoretical and research influences which they would bring to bear on understanding clients' needs.

F. Scientist-practitioner model

This section recorded participants' idiosyncratic definitions of the scientist-practitioner model, their perceptions of its relevance to their work and the factors which they felt would cause a practitioner to adhere more or less closely to the model. An additional area of exploration was comparing and contrasting this term with the concept of 'evidence-based practice' to arrive at an understanding of how participants conceptualised different terminology and perceived its impact on therapeutic activities.

G. Development of own practice over time

Participants were asked if and how they believed their professional practice had developed over time. This included an exploration of skill acquisition, differential use of theoretical models or research findings and whether their sense of professional identity had changed with time.

2.4 Procedure

Participants were recruited on an individual basis for stage 1, with the author contacting individuals by letter and a follow-up telephone call three weeks later. Both these initial sources of contact outlined the purpose for which they were contacted, why they had been identified as potential participants and the nature of

the study. The introductory letter was therefore personalised to reflect the context through which the individual had been identified (see Appendix 4 for an example).

All data were obtained from face-to-face interviews which lasted between one and two-and-a-half hours. Prior to the interview, participants were encouraged to ask any additional questions about its content or process and asked to read and sign the consent form (Appendix 5). Participants were also given a handout containing well-established definitions of the technical terminology under review (Appendix 6). The purpose of this was to guide subsequent discussions and to represent a point of departure in exploring participants' more idiosyncratic perspectives.

Permission was sought to tape record the interviews and six of the eight interviewees agreed. For the remaining two, notes were recorded by hand. At the end of the interview, participants were read the post-interview information sheet (Appendix 7) which thanked them for their participation and requested permission to send them the analysis of their interview, for their comments.

2.5 Analysis of the interview data

The interview data obtained from each participant were typed up, either directly from the audiotapes or reconstructed from the written notes. This represented the permanent record of the interview upon which all subsequent analyses were based. Aspects of grounded theory as outlined by Pidgeon & Henwood (1996) were used to identify and develop critical themes which emerged in relation to the principal research questions. Segments of the text which appeared not to relate to the research questions were discarded. Each paragraph in the text was labelled numerically to facilitate the coding procedure and analysis, which comprised three principal stages:

A. Initial analysis: coding

Relevant themes were initially identified through the author reflecting on what categories, concepts or labels would be necessary to account for the important

phenomena in each segment of text that related to the principal research questions. The phenomena were then tentatively labelled as initial codes. Each initial code was written on an index card and included its paragraph reference within the text (see Appendix 8 for examples).

B. Developing codes: the method of constant comparison

Initial codes which appeared to be related under broader headings were grouped together. As the coding continued, the list of codes expanded and recurring concepts were grouped together as categories. Examples within each category were accumulated until its principal features, components and parameters became clear. This was achieved through a constant process of reviewing the transcripts, exploring the meanings to which each participant attributed a different concept and looking for examples which did and did not fit the emerging category.

C. Core analysis

As the number of categories increased, the categories were refined, extended and related to each other as additional material was explored. This allowed links to be made between the various categories and between participants from the different professional groups. Through this procedure, it became possible to define the categories in a more abstract way by stating in a general form their principal properties and components (Appendix 9).

2.6 Assessment of quality and rigour

Given the essentially exploratory nature of qualitative research and the constructivist assumptions upon which it is based, the reliability and validity of the interview data could not be established through any single, comprehensive procedure. However, alternative methods have been developed to assess the degree of 'trustworthiness' of qualitative research. Through consultation with the literature, several procedures were incorporated to ensure that issues of quality and rigour were addressed. These are examined in turn.

Auditability refers to the ‘opening up’ of the research process to external scrutiny (Stiles, 1993). This was achieved through the author’s emerging thoughts, perceptions and feelings associated with the research being recorded in a research diary (included as an addendum). The research diary also captures the more experiential aspects of the study and allows the author to share how the reflexivity of investigating practice within one’s own profession was managed.

A further procedure adopted was that of **respondent validation**: that is, where the author’s interpretations of the interview data and themes elicited are perceived as accurate to the participants themselves (Silverman, 1993). This was achieved through providing participants with a copy of the author’s analysis on which they were invited to comment through use of the feedback form (Appendix 10a).

Sampling issues were also considered. Sampling followed Pidgeon’s (1996) recommendation that choice of participants may appropriately be driven by theoretical concerns, with individual cases selected for their potential to generate new theory by deepening the investigator’s emergent understanding. In following this recommendation, stage 1 participants were approached on the basis of the author’s beliefs concerning their potential contribution to an emergent corpus of data, following discussions with the author’s supervisor, colleagues with expertise in the field and the participants themselves.

A final procedure undertaken was that of **generativity** which refers to the extent to which the research facilitates further research questions (Henwood & Pidgeon, 1995). In the present study, the emerging theoretical framework facilitated the development of more specific hypotheses which were tested through the development of a survey instrument based on the more abstract definitions of the categories (see stage 2).

3.0 RESULTS

The results from the grounded theory analysis are presented in three sections. The first comprises the emerging categories for each of the four main research questions which are presented, briefly described and illustrated with quotations from the text. This is followed by a description of additional, universal themes that appeared to represent mediators of perceptions of theory and research more generally. Results from the respondent validation are then reviewed. Finally, the emerging categories and themes were used to develop specific hypotheses which are then presented.

3.1 Grounded theory analysis

3.1.1 Categories relating to perceptions of theory

Eleven categories were identified for this research question. These are illustrated in Table 1 and are grouped according to the different professions interviewed, with clinical psychology training staff included in the broader category of clinical psychologists.

Table 1. Emerging Categories for Theory

	Category	Clinical Psychologists (N=4)	Counselling Psychologists (N=2)	Counsellors (N=2)
a	important for effective practice	N=4	N=2	N=2
b	professional responsibility	N=3	N=2	N=2
c	framework for exploration	N=4	N=2	N=2
d	framework for intervention	N=4	N=2	N=2
e	source of containment			N=2
f	aid to challenging situations			N=1
g	framework for communicating ideas	N=3	N=2	N=2
h	theory as a heuristic	N=2	N=2	N=1
i	complex role in practice	N=4	N=2	N=2
j	reciprocity with practice	N=2	N=2	N=2
k	changes in use of theory over time	N=4	N=2	N=2

NB: where no values are shown, this indicates that no participants in that group gave responses relevant to this category

All participants identified theory as an important contributor to effective therapeutic practice (category a in Table 1) and gave examples where use of theory had augmented therapeutic exploration (category c) or intervention (category d). Use of theory was also conceptualised in terms of professional responsibility (b)

representing a means of 'grounding' therapeutic practice in something more rigorous than personal experience or judgement.

Theory was also perceived to serve a number of practical functions, including providing a framework for communicating ideas to other professionals and clients in a way that could deepen rapport and facilitate shared understanding (g). The counsellors also emphasised theory as a source of containment in the face of threats to identity or role (e) and an aid to working in challenging situations, such as when encountering a new presenting problem or therapeutic impasse (f).

All participants felt that the relationship between theory and practice was complex (i). This seemed to be a function of participants' growing realisation over the course of their careers that theory principally represented a heuristic device (h). Several participants, for example, felt that the biggest change in their use of theory over time had been the realisation that theoretical models do not reflect the real-world in any definitive sense. The adding of different models as 'alternative realities' had therefore been an important development in their practice (k).

All participants described how they felt their therapeutic work had evolved over time, with developments being attributed to increased technical skill and theoretical knowledge (k). However, a universal theme was an increased comfort with 'not knowing' in the context of the therapeutic relationship, which referred to the need for openness to the unknown and tolerating the anxiety which this can cause:

"Although safety is necessary, you've got to get somewhere that feels a lot more uncertain if you're going to go somewhere new" (participant 1).

This did not obviate the importance of theory. What seemed critical was the merging of one's ability to tolerate the 'not knowing' with more academically rigorous resources. As participant 1 explained:

"I'm happy with the uncertainty, but somewhere the uncertainty has got to be resolved."

The relationship between theory and practice was also deemed to be reciprocal, rather than linear (j). This resulted in the belief that practice could alter theory, as well as the more traditional notion of practice being 'theory-driven':

"Often in practice, it's not proving or disproving but there are elements of a theory we decide aren't quite working. So in a sense, practice causes theory to adapt" (participant 7).

The reciprocity between theory and practice was believed to make skilled therapeutic work look deceptively simple:

"A good clinician can look like they're not using any theory at all, but that's a very romantic notion...If I only relied on intuition, I wouldn't last very long. There's only a certain amount of substance that can give you" (participant 3).

In summary, the emerging categories suggested that for all participants, theory was an important resource in their therapeutic work, representing a means of 'grounding' one's therapeutic work in something more systematic than personal judgement. However, it was also believed the role of theory in practice was complex and evolved over time as a function of increased therapeutic skill and experience.

3.1.2 Categories relating to perceptions of research

Eight categories were identified for this research question (see Table 2).

Table 2. Emerging Categories for Research

	Category	Clinical Psychologists (N=4)	Counselling Psychologists (N=2)	Counsellors (N=2)
a	professional responsibility	N=3	N=1	
b	contributor to effective practice	N=3	N=1	
c	self-discipline	N=2		
d	inaccessibility	N=1	N=1	N=2
e	need for alternatives to statistical research	N=2	N=2	N=2
f	research as communication about professional role	N=2 (own role)		N=1 (others' role)
g	political role of research	N=4	N=2	N=2
h	unclear use of terminology in current health care climate	N=3	N=2	

NB: where no values are shown, this indicates that no participants in that group gave responses relevant to this category

For participants who had received an initial training in psychology and who continued to identify themselves as psychologists, there was a belief that research evidence formed part of a framework of professional responsibility (category a in Table 2) and was a contributor to effective practice (category b). The category of self-discipline (category c) also indicated that for some, accessing research findings represented a moral imperative.

For others, particularly those who felt themselves to be more allied with the counselling profession, the role of research felt more uncertain (d):

"I don't have a clear definition of research...I guess for me it feels a bit remote. I think in general, research is not part of a counsellor's tool box." (participant 8).

Research was identified as serving a communicative function for clinical psychologists, in terms of informing the world about their own role and how it differed from the other professions (f). The category of research as communication was identified both by two clinical psychologists about their own professional identity and by one counsellor about their perceptions of clinical psychologists.

Critical comments about the contribution of research to clinical practice were confined to large-scale studies whose relevance to therapeutic issues often seemed remote (d). For those who did feel influenced by large-scale statistical research, there was nonetheless a belief that research findings could not be directly translated into clinical realities but were best regarded as offering a framework that could guide clinical decision-making. The need for alternative models of research activity that could embrace more reflective forms of understanding was identified as important (e).

All participants felt that research was playing an increasingly important role in the current NHS climate (g). The potential of research to influence therapeutic practice in an indirect way when used in the service of political goals (g) was also recognised:

"...the danger is that it could be used to cut things when people are actually on the edge of something new. So because you haven't got the evidence, you don't progress. I think (research and psychological evidence) should be used so that when you have the evidence that an intervention *isn't* effective, that's when it shouldn't be used, not to say you shouldn't develop something new" (participant 7).

Several participants felt that this new role for research and psychological evidence had resulted in a lack of clarity in the way that concepts were applied in current health care provision (h). As participant 5 summarised:

"I am aware of the term 'evidence-based practice'. I'm just not sure what people think they mean by it."

The categories, therefore, suggested some professional differences in beliefs about the extent to which research contributes to effective practice and its role within a broader framework of responsibility and accountability. This was compounded by participants' sense of research having an increasingly political role which, for some, caused anxiety about how research could potentially compromise their therapeutic decision-making.

3.1.3 Categories relating to perceptions of the scientist-practitioner model

The eight categories which emerged are presented in Figure 1. All of the categories were identified by the clinical psychologists who discussed the model more extensively than the other participants. The data are organised to reflect this, with the categories identified by the clinical psychologists presented on the central, vertical axis and areas of similarity to participants from the other professional groups demonstrated adjacently.

Figure 1. Emerging Categories for the Scientist-Practitioner Model

Counselling Psychologists	Clinical Psychologists	Counsellors
N=2	a. restricting (N=4)	N=1
N=2	b. diverse interpretations (N=4)	
	c. competing interpretations of science (N=2)	
N=1	d. spirit of enquiry (N=3)	
	e. framework for achieving effective practice (N=3)	
	f. political function (N=4)	N=1
	g. hallmark of identity (self) (N=2)	N=2 (others)
N=2	h. need for alternative models (N=4)	N=1

Participants were asked whether they were familiar with the 'scientist-practitioner model' and then asked to share their definition of it. This yielded eight idiosyncratic interpretations which served the basis for the definitions provided in the survey instrument for stage 2 (see Appendix 11a).

Seven of the eight participants believed that the traditional definition of the scientist-practitioner model was restricting (category a in Figure 1). This was typically associated with how participants construed the nature of scientific activity or awareness of competing interpretations of science from a more philosophical perspective (category c). However, the scientist-practitioner model was also perceived to serve a number of functions. Three of the clinical psychologists and one counselling psychologist believed the model to embody a spirit of enquiry that was important for their profession to retain (category d). Adhering to the model was believed by some to impose standards that could prevent poor practice, implying that the model carried with it a moral injunction to practice in certain ways:

"Essentially, it can be construed as a regulatory system which ensures that people don't go off and do wacky things" (participant 2).

The model was also believed to provide containment in an uncertain and politicised professional climate (f). In particular, it was identified as embodying clinical psychologists' unique professional identity (g) that could enable them to manage pressures associated with the current NHS climate. Both counsellors identified the scientist-practitioner model as alien to their own professional identities but, nonetheless, believed it to embody a certain academic outlook and aptitude for research that typified the profession of clinical psychology.

Proponents of the model seemed to have modified the term to achieve congruence with their own philosophy of practice:

"If people stop using the scientist-practitioner model, then practice is in danger of becoming non-reflective. But this is based on my own interpretation of the model; I operate using my own definition" (participant 6).

The appreciation that different therapists interpreted the model in different ways also emerged from the data (b). However, participants differed in their beliefs about how helpful this was. Whilst participant 6 seemed comfortable in developing his own interpretation, participant 3 expressed concern over the haphazard way in which alternative definitions were being developed and argued for the need to address diversity of interpretation to clarify clinical psychology's future professional role.

For those who attempted to stay closer to the original definition, difficulties with the model were couched in terms of its inability to encompass the more reflective aspects of working. For example, participant 7 struggled to expand the model in a way that could adequately marry rigour and reflection:

"I think it misses out the word 'reflective', but I wouldn't want to throw out scientist either because I think there's something important about that method, of making sure you have the evidence for what you're saying...There's also the intuitive thing that it leaves out which I think has to be subjected to a scientific method. So '*scientist-reflective-intuitive-practitioner*' is kind of it, but it's not very catchy!"

The need for alternative models (h) which could more adequately capture the self-reflective, creative and intuitive elements of practice was identified as important, including by those who believed the model to embody a spirit of enquiry.

Overall, the categories suggested differences between participants from different professional groups. Counsellors did not regard the scientist-practitioner model as relevant to their work. However, they did regard it as a hallmark of clinical psychologists' identity and as serving a political function for this profession. Two of the clinical psychologists also used the model to characterise differences from other professions and the need for containment within the current professional climate. These categories were not identified by the counselling psychologists,

although greater proximity with the clinical psychologists emerged on the themes of diverse interpretations and the need for alternative models.

3.1.4 Categories relating to perceptions of formulation

Participants were asked to give their own, idiosyncratic definition of formulation. These were used as the basis for the definitions provided in the survey instrument for stage 2 (Appendix 12a).

Eight categories emerged from this question. Seven participants were familiar with the term ‘formulation’ and four of these felt that it characterised their therapeutic work. Formulating was an alien procedure to one counsellor (participant 1) who associated it with the work of clinical psychologists. One counselling psychologist (participant 4) was unfamiliar with the term. The categories which emerged were based on the responses of those participants who were familiar with the term and are illustrated in Figure 2.

Figure 2. Emerging Categories for Formulation

Counselling Psychologists	Clinical Psychologists	Counsellors
N=1	a. contributor to effective practice (N=3)	N=1
N=1	b. framework for therapist understanding (N=3)	
N=1	c. guide to therapeutic exploration (N=3)	
N=1	d. synthesis of different forms of knowledge (N=3)	N=1
N=1	e. diverse interpretations (N=2)	N=1
	f. impact of working context (N=2)	
N=1	g. contentious issue (N=1)	
	h. client empowerment (N=1)	N=1

Formulation was identified as an important contributor to effective practice by five participants (category a in Figure 2). Its functions were associated with providing a framework for therapist understanding (category b) and a means of guiding therapeutic exploration (category c). It was also felt that formulation represented an important means of synthesising different forms of knowledge (d), thus providing a vehicle through which more academic sources of understanding (such as theory and research findings) could be united with more intuitive forms of knowing.

It was recognised that therapists could use the term to mean different things (e). Several participants felt that the activities comprising formulation and interpretations of the term varied as a function of the client group or work setting in which the therapist was operating (such as, for example, the impact of offering mainly short-term interventions in primary care settings) (e & f):

"Formulation could be very simple, for example arriving at a single statement such as 'this person's depressed'. Or it could be a well-developed analysis that is an explanation of a person's history and current situation" (participant 2).

Some participants identified formulation as a contentious issue (g). This appeared to be associated with issues of ownership of the formulation and questions about whose formulation was important. For example, where formulation was construed as a framework for understanding the client's problem, formulation represented a process in the therapist's on-going clinical thinking. In contrast, where formulation was construed as a means of client empowerment (h), it was conceptualised as an activity that clients undertake for themselves at the end of therapy, representing an outcome. The therapist's role here was principally one of empowering the client to achieve formulation for themselves. This was associated with the belief that the meaning behind the presenting problem should be allowed to emerge of its own accord, rather than the therapist 'imposing' their own formulation on the client:

"...For me, formulation is imposing too much too quickly and not allowing the meaning to emerge of its own accord. I mean, whose formulation is it? How much is it the therapist's and how much the patient's?" (participant 1.)

In summary, there appeared to be areas of overlap between the professional groups, particularly between the counselling and clinical psychologists. However, considerable diversity of definitions also emerged, suggesting that the concept of formulation may encompass a range of activities. It was also recognised that the activities comprising formulation, or definitions of the term, may vary as a function of therapists' work setting or the client group with which they work.

3.1.5 Thematic analysis

Three themes were identified as being closely related to the research questions. These were universal and represented mediators of participants' perceptions of each of the principal areas of enquiry. They are presented, therefore, to aid understanding of some of the factors which may impact upon attitudes towards theory and research more generally.

(i) Beliefs and Values

The critical importance of professional beliefs and values was identified by all participants. Values were defined as personalised, guiding conceptual frameworks comprising systems of beliefs, cherished ideas and personal philosophies about one's professional role and which were a driving force behind how participants operated. As participant 4 summarised:

"I think practice is about values; it's about the spirit in which you do things and the philosophy which makes you do them."

Values were implicit in participants' perceptions of the scientist-practitioner model, as illustrated by participant 3:

"I believe my job is truly scientist-practitioner...I am teaching, training and doing clinical work. I am trying to write research. I try to integrate all of these aspects at the same time. It's all the things I believe in."

Participants' feelings against the model also appeared to be mediated by personal values. For example, participant 5 conceptualised the model as relating to a positivist view of science that was fundamentally incompatible with his own more reflective and phenomenological philosophy of practice.

Similar issues arose in relation to theory, research and formulation. The function of theory as a key component of effective and responsible practice suggested the critical role played by therapists' values and beliefs about the role of theory. Different attitudes towards research appeared to reflect underlying values about which knowledge bases it was legitimate for therapists to draw upon. Accordingly,

differences of opinion about the 'ownership' of formulation reflected similar underlying values about the function of the therapist within the context of the therapeutic relationship (namely someone who has a responsibility to impose some understanding on the client's problem or someone who represents the 'midwife' to the client's own formulation). As summarised by participant 8:

"There is no 'how to' book. Sure, there are guide-lines...but ultimately you have to write your own."

The influence of idiosyncratic values therefore suggests that therapists may use terminology in different ways in order to create a 'fit' with how they construe their professional role.

(ii) The mediating role of others in the acquisition of knowledge and the communicative function of theory and research

This theme referred to tutors, supervisors and colleagues representing a valuable resource for knowledge acquisition. A related theme was using academic resources to communicate more effectively, indicating a reciprocal relationship between others as a means of accessing academic knowledge and such knowledge then aiding effective communication with colleagues and clients.

Positive experiences of supervision and teaching were identified as critical mediators of the extent to which theory, research and the scientist-practitioner model were integrated with the therapist's own philosophy of practice. For many, contact with peers, supervisors or more experienced colleagues was experienced as "inspirational". However, not all experiences were facilitative. For some, the management of different world views in supervision became vital in order to allow the participant to sustain their own idiosyncratic philosophy of practice. Sources of incongruence included supervisors experienced as 'unhelpful' or disagreements over theoretical issues:

"(My supervisor) was convinced it was to do with the techniques and I was convinced it wasn't but I didn't really know what the hell had created that sort of change...People weren't really able to listen to what I was saying. It was rather dismissed" (participant 7).

For participant 7, this experience was managed by seeking support from more like-minded colleagues with whom she could communicate in a way that facilitated her thinking about what might have resulted in therapeutic improvement for this client.

Experiences of others as a source of growth fed back into subsequent professional development. For those participants who had a supervisory aspect to their professional work, there was an awareness of how their own supervisors influenced the way they communicated ideas to their own trainees:

"I know I really did learn from some of the things my supervisor said, because I often find myself repeating them to my students" (participant 4).

Trainees were also identified as a source of professional growth, representing a new source of knowledge acquisition:

"Sometimes (trainees) come up with something really inspiring and I think 'Wow! I'd really like to follow that through.'...It keeps me broader than I might otherwise be" (participant 7).

Thus the impact of others over the duration of the professional life-span represented a critical mediator of the accessing of academic ideas and served as a bed-rock for subsequent professional communication with others.

(iii) Negotiation of external contingencies

This theme referred to any external event which impinged upon participants' work and whose impact had to be internally processed to allow the participant to remain true to their professional values. Every participant described how their work had been affected by opportunities and pressures afforded by external events. These factors were numerous and ranged from the culture of the organisation in which participants worked and the changing professional climate in the Health Service to time constraints and waiting lists.

External events were often construed as a potential threat to the ability to access theory and research:

"Lack of time is just such a constraint. I end up a bit mind boggled and thinking 'I really ought to read this paper but I don't think I can do it'" (participant 8).

The counsellors voiced particular concerns over external pressures, which were conceptualised in terms of negotiating difference within a larger culture comprising more powerful mental health professions:

"...at the moment, I think it's fair to say that counsellors are employed to do one-to-one clinical work and that, unlike other professions, very little notice is taken of their need to read and discuss theoretical ideas and research" (participant 8).

There was a belief that counsellors' needs for developing their knowledge of theory and research were easily neglected in the current NHS climate. This led to a fear of potential professional isolation that could, in the longer-term, affect the quality of their therapeutic work.

The importance of coming to terms with what couldn't be changed, particularly at an organisational level was also identified as a critical task:

"It's frustrating being in an organisation that I don't have a managerial influence on. That's the stress and so letting things go that you know you can't do anything about...you just have to work through it as much as you can" (participant 7).

The need to manage incongruence between personal values and those of the organisation was critical because of the belief that any mismatch could be communicated to the client in a way that was counter-therapeutic (for example, being able to offer only short-term work when the therapist believed that long-term work was preferable). This was illustrated by participant 2 who felt that increasing emphasis on short-term, primary care-led NHS would require formulation skills to evolve to focus principally on 'why now' questions in preference to predisposing factors. This theme also related to perceptions of the scientist-practitioner model. Participant 3, for example, identified the multiple pressures stemming from

adopting a professional stance that was truly 'scientist-practitioner' in terms of having to find the time and the resources to carry out the values embedded in the model.

3.1.6 Respondent validation

A summary of the emerging categories was prepared for each of the participants and included examples from their own interview to illustrate the categories further. Seven participants returned their feedback form (Appendix 10a) which enabled the examination of respondent validation. All the participants agreed broadly with the analysis. Examples of participants' comments are illustrated below:

"I agree wholeheartedly with your analysis...I think it is excellent" (participant 3).

"I found the coded transcript fascinating and to a large extent it articulated the basis of my own theory and practice in a much clearer way than I could have expressed it myself" (participant 4).

"It seems very impressive...the category analysis does not have the effect of reducing what has been said but accurately reflects the diversity of material" (participant 7).

Participant 7 did, however, question the emphasis the author had placed on the perceived difference between the mental health professions in their awareness of research evidence. This was discussed further and the emphasis modified slightly.

Six of the seven respondents also indicated positive feelings about the research process, suggesting that participation had provided an opportunity for personal reflection about the way they work. Two representative comments are illustrated below:

"I thought you handled the interview extremely well and made it easy for me to be open. The interview was an extremely pleasant experience that gave me time to develop ideas creatively as well as say what I thought. Thanks for the work."

"I am fascinated by the process. It might even encourage me to do some research...I feel respected and even a tiny bit honoured to be treated so carefully and with such trouble taken to listen and understand. Actually, in talking to you and now in reading the transcript, I have been able to clarify my own thinking."

No negative comments, either about the analysis of the interview data or about the research process were made. A full list of comments is available from the author, on request.

3.1.7 Using the categories and themes to develop specific hypotheses: an emerging theoretical framework for exploring similarities and differences

The categories and themes were used to develop a theoretical framework that could guide the development of more specific hypotheses about the factors that impact on therapists' perceptions of theory, research, the scientist-practitioner model and formulation.

Overall, the findings suggested that therapists make use of academic resources through integrating them with an individualised philosophy of practice. This suggests a complex relationship between theory, research and practice which appears to be mediated by a range of factors including relationships with others and pressures from the external environment. An additional, more tacit theme was that of similarity and difference which emerged through categories relating to identity and 'ownership' of frameworks such as the scientist-practitioner model and formulation. This suggested underlying concerns about similarities and differences of values and skills as a function of professional allegiance, relating to more general issues of equality and power.

The categories suggested that perceptions of theory evolve over the course of the professional life-span. Overall, however, there appeared to be few differences between the professions in their perceptions of the role of theory. The only variation between professional groups was in relation to the practical functions of theory, whereby counsellors particularly emphasised the value of theory in providing a 'buffer' against external pressures and expressed concerns that their needs for professional development were easily neglected. This suggested that counsellors will experience their beliefs about the role of theory as being more

greatly affected by external factors than participants in the other professional groups.

Perceptions of research appeared to differ as a function of participants' professional allegiance. However, awareness of the political role of research and an increased preoccupation with accountability in the current NHS climate suggests that beliefs about the role of research may also vary according to the setting in which therapists work.

Differences between the professional groups also seemed apparent from the scientist-practitioner categories. The emphasis on the model representing a hallmark of identity and its more political function, suggested that therapists' beliefs about its value will vary according to their work setting. However, the emphasis on the scientist-practitioner model as a spirit of enquiry and a potential contributor to effective practice, coupled with beliefs that it was restrictive and the recognition of diverse interpretations, indicated that therapists will have different beliefs about the value of the model according to how they define it.

Similarly for formulation, a range of definitions and recognition of diversity of interpretation emerged, suggesting that perceptions of its value as a framework for guiding therapeutic practice will vary according to how individual therapists define it. Recognition that formulation could also mean different things according to the type of clinical work undertaken, indicated the need to explore further whether beliefs about the helpfulness of formulation varied according to the kind of therapeutic work in which therapists were involved.

Whilst the analysis suggested the importance of particular themes and areas of differences between professions, the small numbers of participants involved prevented more definitive conclusions from being drawn. In order to test the validity of the grounded theory analysis further, specific themes were selected for quantitative analysis, through the following experimental hypotheses:

3.1.8 Hypotheses

The following experimental hypotheses were tested:

Attitude towards Theory

1. There will be a relationship between duration of therapeutic practice and attitude towards theory.
2. There will be a difference between the professional groups in their beliefs about the extent to which external factors impact on their use of theory.

Attitude towards Research

3. There will be a difference between professional groups in their attitude towards research.
4. There will be a difference in attitude towards research between those therapists who work in NHS settings, those who work in non-NHS environments and those working in combined settings.

Attitude towards the Scientist-Practitioner Model

5. There will be a difference between professional groups in their attitude towards the scientist-practitioner model.
6. Attitude towards the scientist-practitioner model will differ according to whether participants work in NHS, non-NHS or combined settings.
7. Attitude towards the scientist-practitioner model will differ as a function of participants' definition of the model.

Attitude towards Formulation

8. There will be a difference in attitude towards formulation according to the client group with which participants are working.
9. Attitude towards formulation will differ according to how participants define it.

The Null hypothesis in all cases was that there would be no differences between groups and no relationship between factors. Following the recommendations proposed by MacRae (1995), all the experimental hypotheses were 2-tailed, as were the analyses subsequently undertaken to test them. The next section describes the method through which these themes were converted into a quantifiable format and is followed by a presentation of the results obtained.

STAGE 2

2.0 METHODOLOGY

2.1 Design

An independent groups and factorial design was used to investigate differences and interactions between participants' beliefs, their professional allegiances and work setting. A correlational design was used to examine the relationship between duration of therapeutic practice and theory attitude scores on the Attitudes to Theory and Research Inventory, devised for the purposes of the study.

2.2 Participants

Participants for stage 2 were recruited through several sources. Firstly, qualified clinical and counselling psychologists were identified through the British Psychological Society's (BPS) 'Register of Chartered Psychologists' (1996). Qualified counsellors were identified through the author gaining access to a database of counsellors from an independent primary health care trust.

Trainee therapists were identified through BPS' accredited clinical and counselling psychology training schemes and counselling courses which were 'recognised' by the British Association for Counselling (BAC; 1997). In order to ensure a degree of comparability between the diverse courses, only those offering training of two or more years' duration were approached.

A total of 153 participants were recruited for stage 2. Table 3 illustrates their key characteristics:

Table 3. Summary Characteristics of Stage 2 Participants

Descriptor		Clinical Psychologists		Counselling Psychologists		Counsellors	
Professional Group:		Trainee N=52 (40%)*	Qualified N=31 (23.85%)	Trainee N=14 (10.76%)	Qualified N=21 (16.15%)	Trainee N=6 (7.05%)	Qualified N=29 (22.31%)
Age. Mean (sd)		28.42 (4.67)	45.61 (8.52)	33.43 (7.82)	50.62 (8.19)	40.67 (6.35)	47.17 (9.31)
Gender. Female: Male		43:10	18:13	10:4	14:7	6:0	21:8
NHS Employed:	Full-time	N=52	N=14	N= 8	N= 2	N= 3	N= 3
	Part-time	N= 0	N=15	N= 2	N= 7	N= 0	N=16
	Not at all	N= 0	N= 2	N= 4	N=12	N= 3	N=10
Preferred Therapeutic Model:	Single	N=14	N=16	N= 4	N= 9	N= 3	N= 8
	Dual	N=17	N= 7	N= 2	N= 4	N= 1	N= 2
	Multiple (>2)	N=20	N= 8	N= 8	N= 8	N= 2	N=19

* Percentage in parenthesis indicates percentage response rate for that professional group

A further sample of N=61 (9.73% of the total number of non-respondents) gave reasons for non-participation through using a form devised for this purpose (Appendix 13). These included work-related or domestic pressures (N=10); lack of interest in the area being investigated (N=4) and the length of the measures (N=3). Appendix 14 provides a more detailed summary of reasons for non-participation.

2.3 Measures

The measures for stage 2 comprised the following:

2.3.1 Demographic Information Sheet (Appendix 15)

This was designed by the author in consultation with the research supervisor and included demographic information such as gender, age, professional title and length of time in training or qualified. It also explored areas of professional interest, such as client groups worked with and preferred therapeutic orientation. Participants were also asked to indicate whether they were employed in NHS settings for all, part or none of their work.

2.3.2 Attitudes to Theory and Research Inventory (ATRI; Appendix 16)

The measure was devised to reflect, as closely as possible, the key themes which had emerged from the grounded theory analysis. The construction of the measure followed the framework for questionnaire design proposed by Rust & Golombok (1989) which is outlined below:

A. Converting the interview data into a questionnaire format

A grid structure was used to determine the content areas of the measure and the ways in which the content areas became manifest. The grid comprised a 4 x 4 structure to ensure sufficient breadth whilst maintaining manageability (Rust & Golombok, 1989). Table 4 illustrates the blueprint grid whereby the content areas reflect the principal areas of enquiry identified by the author and the manifestations represent the broad themes which emerged from the qualitative analysis. The theme

of ‘relationship with practice’ was also added as a manifestation, as this was a central focus of the study:

Table 4. The Grid Structure used to devise the Survey Instrument, based on Rust and Golombok’s Model of Questionnaire Design

M A N I F E S T A T I O N S	CONTENT				
	25%	25%	25%	25%	100%
	Theory	Research & Psychological Evidence	Scientist-Practitioner Model	Formulation	Number of Items
	Relationship with Practice (items 1-12)	12	12	12	48
	Beliefs & Values (items 13-24)	12	12	12	48
	Communicative Function (items 25-30)	6	6	6	24
	External Contingencies (items 31-40)	10	10	10	40
	Number of Items	40	40	40	160

Weightings were assigned to each of the content and manifestations areas of the blueprint to ensure a distribution of items that reflected the emphasis on each theme obtained from the interview data.

B. Generation of items

The measure comprised four types of questions. Firstly, individual statements were devised relevant to each of the cells, to which participants were requested to respond on a four-point rating scale (1=*strongly disagree*; 4=*strongly agree*). The aim of providing four categories of response was to provide a sufficient number of options for participants to feel able to express themselves adequately without so many options that discrimination became meaningless. A decision was made, however, to omit a middle category (‘uncertain’) in order to avoid a central tendency (Rust and Golombok, 1989).

Items for each of the manifestations were generated from the abstract definitions obtained from grounded theory analysis. A decision was made to word items in a positively connoted way, to imply opportunity. In order to ensure that participants felt able to disagree with positively worded items, introductory statements were included at the beginning of each section, highlighting that not all concepts were uniformly emphasised by different professions and the importance of their personal views.

Secondly, the measure included additional factors which stage 1 participants had identified as important in the development of their attitudes. These were rated on a 10-point scale and comprised the influence of others, knowledge or experience acquired through academic study and the culture of the professional organisation in which participants worked. Thirdly, participants were requested to provide a brief example from their work, pertaining to the category and to give an overall rating of how important the category had been (ranging from *not at all important* to *essential*).

Finally, given the variations in interpretation of both the scientist-practitioner model and the concept of formulation elicited from the qualitative interviews, participants were requested at the beginning of these sections to identify the definition that felt most meaningful to them personally. The definitions included those given by stage 1 participants, a standard definition of the scientist-practitioner model obtained from a well-established source (Barlow *et al.*, 1984) and an alternative to the original, proposed by Milne *et al.* (1990). The definitions of formulation comprised those provided by stage 1 participants and a definition established at one clinical psychology training scheme (refer to Carter, 1994) (see Appendices 11a; 12a and 16).

2.3.3 Scientist-Practitioner Inventory (SPI; Appendix 17)

The SPI (Leong and Zachar, 1991) is a 42-item self-report inventory which comprises two 21-item scales measuring academic-scientist interests and activities associated with the role of the clinical-practitioner respectively. Each item is rated on a five-point scale (1=*very low interest*; 5=*very high interest*). The scientist dimension comprises activities such as research design, statistics, teaching and interest in academic ideas whereas the practitioner dimension is associated with items relating to therapeutic practice, consultancy work and psychological testing. The measure has demonstrated high internal consistency and validity coefficients (Leong & Zachar, 1991).

2.3.4 Participants' feedback form (Appendix 18)

As the questionnaire was closely based upon interview data, it was deemed important to obtain participants' feedback on the nature of the material covered. Participants were invited to comment on the measures specifically and the study generally.

2.4 Piloting of the measures

The measures were piloted on four trainee clinical psychologists to ensure that the items were clear and that the content felt meaningful to the investigation. Brief subsequent interviews indicated that the content of the measure felt appropriate and that the items were unambiguous, with only one minor rephrasing considered necessary (see Appendix 19). It was noted that completing the measures was reasonably time consuming. However, the pilot participants indicated that given the breadth and depth of the themes being investigated, its length felt appropriate. The measure was not, therefore, shortened.

2.5 Ensuring reliability and validity

Preliminary examinations were undertaken to examine the reliability and validity of the ATRI. Cronbach's alpha coefficients were calculated based on responses to

each of the separate subscales of the measure (items 1-40 on the theory, research, scientist-practitioner model and formulation sections) to examine the reliability of the measure. These analyses yielded the following results:

Table 5. Reliability Analysis on the Subscales of the ATRI

Subscale	Cronbach's Alpha Coefficient
Theory subscale	.75
Research subscale	.89
Scientist-practitioner subscale	.90
Formulation subscale	.79

NB: All coefficients have been rounded up to 2 decimal places

Using .7 as a cut-off score (Rust and Golombok, 1989), the results suggested that the subscales of the measure had high internal consistency.

The convergent validity of the measure was established through correlating the scores on the subscales of the ATRI with the relevant subscales of the SPI. The results are shown in Table 6:

Table 6. Correlations between Subscales of the ATRI and SPI

SPI	ATRI				
	Theory coefficient (sig.)	Research coefficient (sig.)	Scientist-Practitioner coefficient (sig.)	Formulation coefficient (sig.)	Total coefficient (sig.)
Research	-	.59 (p .000)**	-	-	-
Practitioner	.36 (p .000)	-	-	.22 (p .026)*	-
Total	-	-	.37 (p .001)**	-	.53 (p .000)**

* significant at the p < .05 level

** significant at the p < .001 level or above

NB all coefficients have been rounded up to 2 decimal places

The results demonstrated statistically significant correlations between the research and scientist-practitioner subscales of the ATRI and the research subscale of the SPI and between the theory and formulation subscales of the ATRI and the practitioner subscale of the SPI. There was also a statistically significant correlation between the total scores of both measures. Overall, the results therefore indicated that the ATRI had achieved convergent validity.

2.6 Procedure

Given that the questionnaire was an adjunct to stage 1 of the method, a decision was made to sample qualified and trainee professional groups. Following discussions with individual training schemes, the author ascertained that the maximum number of trainee counselling psychologists that could be recruited was 130. Samples of 130 participants were approached, therefore, in each of the other groups, to ensure equity in the sampling procedure. Samples were obtained using a stratified sampling procedure by the following methods. A sample of qualified clinical psychologists was obtained by contacting every 20th name on the BPS' Register of Chartered Psychologists. A separate list of chartered counselling psychologists was also obtained from the BPS, whereby every second name was approached. Lists of accredited counsellors were accessed through a primary care trust database, from which every sixth name was selected.

In order to recruit trainee therapists, courses in clinical psychology and counselling training were selected using a stratified sampling procedure. As there were only two accredited counselling psychology training schemes, both were included. Prior to contacting trainees, the author wrote to the directors of the identified training schemes requesting permission to proceed (Appendix 20). Additional telephone contact with the directors of the counselling courses took place to ensure that the measures were relevant to their trainees. Following recruitment difficulties of trainee counsellors, a smaller sample of 85 was obtained from three counselling courses.

All participants were sent a research 'pack' through the post. Each pack comprised the following: (1) an introductory letter, detailing the aims of the study and highlighting the voluntary and confidential nature of participation (Appendix 21); (2) the demographic information sheet; (3) the ATRI; (4) the SPI; (5) the feedback form; (6) the form which participants were requested to complete and return if they had chosen not to participate and (7) a request form for a report on the study's

findings (used for stage 1 participants also; Appendix 22). Participants were also sent a pre-paid envelope in which to return their completed measures. Informed consent was established by virtue of returned forms.

3.0 RESULTS

The results obtained from the quantitative analyses are presented in four sections. Firstly, the integrity of the data is reviewed. This is followed by an overview of the scoring procedure used on the ATRI. Preliminary analyses on potential confounding variables are then discussed and finally, the results obtained for each of the hypotheses are presented.

3.1 Quantitative Analyses

3.1.1 Establishing the integrity of the data

Data were analysed using SPSS for Windows. Examination of the distributions using histograms and the Kolgomorov-Smirnov test indicated that the data were normally distributed. Analysis of the scores also confirmed that homogeneity of variance had been established, except where noted otherwise. The data were therefore regarded as fulfilling the criteria for parametric tests, which were subsequently used. However, given the small numbers of participants in each group, statistical advice was also sought from a statistician. Pearson's correlation was used to identify the relationship between duration of therapeutic practice and attitudes towards theory. Differences between professional groups were investigated using one-way Analysis of Variance (ANOVA) and interactions between work setting and attitude scores examined using a general factorial design. As this was an exploratory study, a significance level of $p < .05$ was used.

3.1.2 Scoring procedure

A total attitude score was calculated for each of the four subscales of the ATRI: theory, research, the scientist-practitioner model and formulation. This entailed summing the forty items on each subscale, whereby the higher the score, the more positive and consistent the attitude towards that variable. Where reference is made to 'attitude towards' or 'theory/research attitude', this refers to the total attitude score on this subscale.

3.1.3 Preliminary analyses

A number of preliminary investigations were conducted to identify any confounding variables that would need to be controlled for in subsequent analyses. Firstly, previous research on the SPI suggested potential gender differences on perceptions of theory and research (Zachar and Leong, 1992). It was, therefore, deemed necessary to explore the data for any gender differences on the subscales that could affect subsequent analyses. Use of independent t-tests demonstrated no such differences, indicating that gender did not need to be explored further within the context of the study.

Secondly, given the small numbers of counselling and counselling psychology trainees, a decision was made to combine training and qualified therapists under the broader heading of 'professional group' on hypotheses relating to attitude differences on theory, research and the scientist-practitioner model. This yielded three new groups: clinical psychologists (trainee and qualified); counselling psychologists (trainee and qualified) and counsellors (trainee and qualified). In order to ensure that this was statistically appropriate, independent t-tests were conducted to compare trainee and qualified therapists on the research and scientist-practitioner subscales of the ATRI.

No significant differences between qualified and trainee groups on these subscales were found. It was, therefore, considered justifiable to merge trainee and qualified therapists for the purposes of hypothesis-testing on these variables. (As these results were not central to the nature of the enquiry itself, they are presented in Appendix 23 and 24, where a full summary of the findings can be found.)

3.2 Statistical testing of hypotheses

3.2.1 Attitude towards theory

Hypothesis 1. There will be a relationship between duration of therapeutic practice and attitude towards theory

Pearson’s correlation coefficient was used to investigate the relationship between duration of practice and theory attitude. The results are presented in Table 7.

Table 7. Correlation between Duration of Therapeutic Practice and Theory Attitude

Variable	Clinical Psychologists (N=70)		Counselling Psychologists (N=25)		Counsellors (N=24)		Total Sample (N=119)	
	coefficient	sig.	coefficient	sig.	coefficient	sig.	coefficient	sig.
Duration of Practice	.03	.783	-.07	.718	.15	.472	.03	.763

All coefficients have been rounded up to 2 decimal places

The lack of a significant correlation for any of the professional groups suggested that there was no relationship between duration of practice and attitude towards theory. Hypothesis 1 was, therefore, rejected.

Hypothesis 2. There will be a difference between the professional groups in the impact that external factors have on attitude to theory

A one-way ANOVA was used to investigate differences between the professional groups in their theory attitude, according to external factors (as measured on items 31-40). The results are shown in Table 8:

Table 8. Differences between Professional Groups in the Impact that External Factors have on Attitude to Theory

Professional Group	Clinical Psychologists (N=82)	Counselling Psychologists (N=30)	Counsellors (N=34)
mean (sd)	27.05 (2.41) *	26.60 (2.97)	25.65 (2.59) *

* significantly different groups at the p <.05 level (Scheffé test)

Source	df	Sum of Squares	Mean Squares	F Ratio	2-tailed sig.
Between Groups	2	47.26	23.63	3.57	.03 *
Within Groups	143	946.77	6.62	-	-
Total	145	994.03	-	-	-

* significant at the p < .05 level

All figures have been rounded up to 2 decimal places

On items 31-40 of the ATRI, a lower scores indicates a theory attitude that is more likely to be influenced by external events. The results suggest differences between the professional groups, with counsellors demonstrating a significantly higher degree of influence of external factors on their theory attitudes than clinical psychologists. This suggests that counsellors' attitude towards theory is more influenced by, for example, work-related pressures and the culture of the organisation than the other professional groups. Hypothesis 2 was, therefore, supported.

3.2.2 Attitude towards Research

Hypothesis 3. There will be a difference between professional groups in their research attitude

A One-way ANOVA was used to compare differences between the professional groups in their research attitude:

Table 9. Difference between Professional Groups in their Research Attitude

Professional Group	Clinical Psychologists (N=77)	Counselling Psychologists (N=22)	Counsellors (N=21)
mean (sd)	116.39 (10.86) *	112.32 (12.26)	106.10 (16.13) *

Source	df	Sum of Squares	Mean Squares	F Ratio	2-tailed sig.
Between Groups	2	1811.09	905.55	6.11	.003**
Within Groups	117	17326.89	148.09		
Total	119	19137.99			

* significantly different groups at the p <.05 level (Scheffé test)

** significant at the p < .05 level

All figures have been rounded up to 2 decimal places

The results shown in Table 9 indicate a significant difference between the groups in their attitude towards research, with clinical psychologists obtaining scores that were significantly different from counsellors. This suggests that overall, clinical psychologists have a more positive outlook towards the role of research in practice than the other professional groups. Hypothesis 3 was, therefore, confirmed.

Hypothesis 4. There will be a difference in research attitude between those therapists who work in NHS settings, those who work in non-NHS environments and those working in combined settings

A one-way analysis of variance was used to investigate differences between those who worked in NHS, non-NHS and combined settings (see Table 10):

Table 10. Differences in Research Attitude according to Work Setting

Work Setting	NHS (N=74)	Non-NHS (N=17)	Combined Settings (N=29)
mean (sd)	116.42 (10.31) *	113.24 (12.94)	107.62 (15.90) *

* significantly different groups at the $p < .05$ level (Scheffé test)

Source	df	Sum of Squares	Mean Squares	F Ratio	2-tailed sig.
Between Groups	2	1611.07	805.54	5.36	.006 **
Within Groups	116	17512.04	150.97		
Total	118	19123.11			

** significant at the $p < .01$ level
All figures have been rounded up to 2 decimal places

The results suggest differences between the professional groups in their attitudes towards research, with a significant difference between those working in NHS and combined settings. Examination of the mean scores for each group indicated that those working in NHS settings had a more positive attitude towards research than those working in other settings. Thus hypothesis 4 was confirmed. However, visual inspection of the data suggested that the attitude differences on work setting could have been affected by the confounding variable of professional group. Subsequent analysis was undertaken, therefore, to explore whether such an association was present:

Table 11. Chi-Square Test of Association between Work Setting and Professional Group

Chi-Square	Value	df	2-tailed sig.
Pearson Statistic	59.54	4	.00000 ***

*** significant at below the $p < .001$ level
Pearson Statistic has been rounded up to 2 decimal places

Table 11 illustrates the extremely significant relationship between work setting and professional group, suggesting that professional allegiance may have represented a confounding variable of attitude differences according to work setting. Although the Chi-Square result puts the use of a factorial design in question, the possibility of investigating the interaction between work setting and professional group was explored. However, this was not pursued due to inadequate homogeneity of variance.

3.2.3 Attitude towards the Scientist-Practitioner Model

One hundred and thirty four participants (87.58% of the entire sample) were familiar with the term ‘scientist-practitioner model’ (see Table 12):

Table 12. Numbers of Participants Familiar with the Scientist-Practitioner Model

	Clinical Psychologists (N=83)		Counselling Psychologists (N=35)		Counsellors (N=35)	
Familiarity	Trainee	Qualified	Trainee	Qualified	Trainee	Qualified
Yes	N=52	N=30	N=11	N=18	N=2	N=21
No	-	-	N= 3	N= 3	N=2	N= 8
Blank	-	N= 1	-	-	N=2	-

Subsequent analyses involving the scientist-practitioner model were based only on those respondents who reported being familiar with the term.

Hypotheses 5 and 6 predicted: *(5) a difference between professional groups in their attitude towards the scientist-practitioner model* and that *(6) attitude towards the scientist-practitioner model will differ according to whether participants work in NHS, non-NHS or combined settings*. Given the association between work setting and professional group, these hypotheses were looked at in the same analysis. Although the Chi-Square result (Table 11) put the use of a factorial design in question, homogeneity of variance was established and therefore the interaction between work setting and professional group was investigated. This yielded the following results:

Table 13. Differences in Scientist-Practitioner Attitude as a function of the Interaction between Professional Group and Work Setting

Scientist-Practitioner Attitude						
	NHS		Non-NHS		Combined	
Professional Group	mean (sd)	N	mean (sd)	N	mean (sd)	N
Clinical Psychologists	114.18 (13.37)	N=39		N= 1	111.62 (9.46))	N= 8
Counselling Psychologists	115.86 (6.09)	N= 7	100.00 (14.48)	N= 4	90.33 (25.11)	N= 3
Counsellors	103.00 (7.07)	N= 2	107.60 (12.97)	N= 5	84.40 (23.47)	N= 5

Source of Variation	Sum of Squares	df	Mean Squares	F	2-tailed sig.
Within + Residual	13989.54	65	215.22	-	-
Professional Group	1726.88	2	864.44	4.01	.023*
Work Setting	1967.64	2	983.82	4.57	.014**
Professional Group by Setting	1767.02	4	441.76	2.05	.097
Total	20146.59	73	275.98	-	-

* significant at the p < .05 level

** significant at the p < .01 level

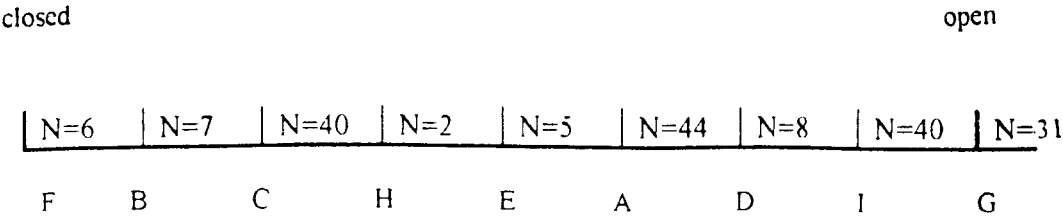
All figures have been rounded up to 2 decimal places

Table 13 illustrates that the main effects of work setting and professional group were significant. However, the interaction between them was not. This suggests that the higher scores of those working in NHS settings on scientist-practitioner attitude were not simply an artefact of professional group but represented a genuine, independent effect.

Hypothesis 7. Attitude towards the scientist-practitioner model will differ as a function of participants' definition of the model

The nine original definitions provided were re-ordered along a closed- to open-ended continuum, as illustrated below:

Figure 3. Re-ordered Definitions of the Scientist-Practitioner Model



In order to provide a more manageable number of groups for subsequent analysis, the definitions were combined, by grouping them in pairs. A one-way ANOVA was then used to investigate differences in attitude according to definition. The recoded definitions and subsequent results are presented in Table 14.

Table 14. Differences in Scientist-Practitioner Attitude according to How it is Defined

Recoded Definition	Mean (sd)	N
Definition 1 (F + B) *	76.00 (18.67)	4
Definition 2 (C + H)	111.56 (15.31)	18
Definition 3 (E + A)	114.76 (12.05)	17
Definition 4 (D + I)	111.38 (12.64)	16
Definition 5 (G)	110.00 (17.20)	18

* significantly different groups at the $p < .05$ level (Scheffé test)

Source	df	Sum of Squares	Mean Squares	F Ratio	2-tailed sig.
Between Groups	4	5083.85	1270.96	5.85	.0004 ***
Within Groups	68	14779.03	217.34		
Total	72	19862.88			

*** significant at the $p < .001$ level

All figures have been rounded up to 2 decimal places

The results demonstrate a difference in attitude towards the scientist-practitioner model according to how it is defined, with a significant difference between definition 1 and the other definitions. This suggests that how therapists define the model is related to the extent to which they regard it as useful (see also Appendix 11b, where the first, second and third ranked preferences for each participant group are illustrated).

3.2.4 Attitude towards Formulation

One hundred and thirty five participants (88.25% of the total sample) were familiar with the term ‘formulation’ (see Table 15):

Table 15. Numbers of Participants Familiar with Formulation

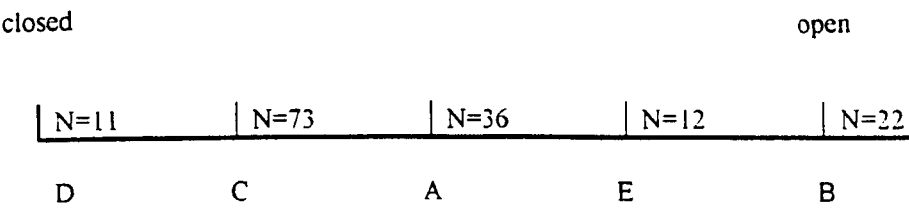
Familiarity	Clinical Psychologists (N=83)		Counselling Psychologists (N=35)		Counsellors (N=35)	
	Trainee	Qualified	Trainee	Qualified	Trainee	Qualified
Yes	N=52	N=30	N=13	N=15	N= 3	N=22
No	-	-	N= 1	N= 6	N= 2	N= 7
Blank	-	N= 1	-	-	N= 1	-

Subsequent analyses involving formulation were based only on those respondents who reported being familiar with the term.

Hypothesis 8. There will be a difference in attitude towards formulation according to Clinical Specialty

As with the scientist-practitioner model, the definitions of formulation provided were re-ordered along a closed to open-ended continuum, as illustrated in Figure 4:

Figure 4. Re-ordered Definitions of Formulation



The main client group with which each participant worked was recoded as one of four specialties. Differences in formulation attitude according to client group were then investigated using a one-way ANOVA. The recoded clinical specialties and the results are presented in Table 16:

Table 16. Differences in Formulation Attitude according to Clinical Specialty

Recoded specialty	Mean (sd)		N		
1. Adult mental health and primary care	111.43 (9.08)		63		
2. Child	111.00 (9.76)		12		
3. Disability (learning disabilities, health and neuro)	116.77 (7.69)		13		
4. Older Adults	117.71 (6.02)		7		

Source	df	Sum of Squares	Mean Squares	F Ratio	2-tailed sig.
Between Groups	3	526.14	175.38	2.25	.087
Within Groups	91	7089.16	77.90		
Total	94	7615.31			

Table 16 illustrates that there were no significant differences between clinical specialties. This suggested that there were no differences between participants working with different client groups in their attitude to formulation.

Hypothesis 9. The attitude towards formulation will differ according to how participants define it

The reordered definitions of formulation (closed-open) served as the basis for investigating whether attitude towards formulation differed as a function of how participants defined it, using a one-way ANOVA (see Table 17):

Table 17. Differences in Formulation Attitude according to How it is Defined

Definition	Mean (sd)	N
Definition 1 (D)	114.37 (8.58)	19
Definition 2 (C)	108.60 (11.66)	10
Definition 3 (A)	112.27 (8.64)	56
Definition 4 (E)	113.80 (9.63)	5
Definition 5 (B)	117.00 (6.54)	6

Source	df	Sum of Squares	Mean Squares	F Ratio	2-tailed sig.
Between Groups	2	239.22	119.61	1.55	.219
Within Groups	96	7433.51	77.43	-	-
Total	98	7672.73	-	-	-

All figures have been rounded up to 2 decimal places

The lack of significant differences in attitude towards formulation according to how participants defined it, suggested no causal relationship between idiosyncratic definitions and perceptions of its value. Hypothesis 9 was therefore not supported. (See Appendix 12b for the ranked preferences in definition of each participant group.)

4.0 DISCUSSION

The discussion is presented in four broad sections. Firstly, the method is examined in order to place the findings in context. Secondly, the results are reviewed. The contribution of the results to the existing debate is then explored and recommendations are made for future research. Finally, the implications for training and professional development are discussed.

4.1 Methodological issues

Overall, the use of a mixed method to explore initial research questions and guide the development of more specific hypotheses was beneficial. Six of the nine hypotheses were supported, suggesting that the grounded theory framework was useful for generating subsequent hypotheses. However, the results must be viewed within the context of a number of methodological factors.

Firstly, the method was hampered by difficulties with recruitment. Although stage 2 represented an adjunct to the interviews and was, therefore, not intended to constitute a national survey in scale, recruitment of chartered clinical and counselling psychologists was restricted to the BPS' Register due to a lack of alternative sources. As registration is voluntary, this may have resulted in a sampling bias.

It also proved difficult to access counsellors. In an attempt to obtain the names and work settings of psychologists and counsellors and information about their work settings, the author contacted several organisations, including the BPS, BAC and an independent organisation promoting a database of mental health directorates. However, in all cases, the author was informed that comprehensive information about practicing therapists and their working environments did not exist. This raises questions about how the professions of counselling and psychology keep track of their members and how standards are monitored at a national level in the absence of this information.

Secondly, it proved difficult to recruit counselling trainees. Whilst close liaison with directors took place for all counselling courses approached, the majority of courses declined to participate, typically citing previous bad experiences of participation in research or involvement in existing studies.

This raises questions about how research undertaken by a clinical psychology trainee is conceptualised. This may be partly explicable through the work of Lee (1993) who points out that any research which seems to threaten the alignments or interests of those being studied touches on issues of power and control. The researcher, when unfamiliar, can be conceptualised as someone seeking discreditable information that leads to a fear of scrutiny. This may have been particularly relevant here, whereby addressing beliefs about theory and research could have been construed as an attempt to pass judgements on different professions. Retrospectively, personal meetings with course directors and trainees may have been preferable to written correspondence, where opportunities for raising anxieties about underlying research agendas and potentially 'unfavourable' comparisons could have been provided in advance, in order to address them.

Furthermore, by the time agreement had been secured, many trainees from the counselling and counselling psychology courses were undertaking exams. Communication from several individuals who identified themselves as counselling or counselling psychology trainees on the non-participation form (Appendix 13) indicated that their decision not to participate had been based on exam or other work-related pressures. This suggests one reason why response rates were particularly low for this group and indicates that timing may have been a critical issue.

The small samples sizes had implications for the statistical analyses and the interpretations drawn from them. A decision was made to use a factorial design to investigate the interaction between professional group and work setting on scientist-

practitioner attitude, given that homogeneity of variance had been established. However, on the basis of the highly significant association between professional group and work setting (see Table 11), this decision could be questioned. A greater number of respondents would have increased the sizes of the cells and thus the confidence in statistical interpretation which, at this level, must remain cautious. It could also be argued that non-parametric tests should have been used, as these better accommodate unequal variances and unequal cell sizes.

Responses to the survey instrument were mixed. Some participants found the measure rich and thought-provoking and felt that the content captured their own experiences and dilemmas of professional practice. This culminated in requests for permission to use it as a basis for teaching students and staff about factors which can impact on the use of theory and research in therapeutic practice. Several others reported beneficial consequences from having participated in terms of thinking about their attitudes and beliefs in a new way.

For others, participation had felt less positive. Several participants felt that the measure was too long and complex. One person reported finding it 'boring' and another participant explained that they:

"...had not entered a career in clinical psychology to pursue such research when there were so many real problems that needed addressing".

A minority of participants also felt that given the complexity of the area under investigation, a five-point rating scale with a middle category of 'don't know' would have been preferable.

Making sense of these diverse responses proved challenging. However, in reviewing the literature and reflecting on Lee's (1993) work on sensitive research areas, it seemed that some of the more extreme responses mirrored the very strong opinions which characterise the literature more generally. This highlights that investigating therapists' beliefs about the resources they bring to their work is an

emotive area of enquiry and may relate closely to how therapists construe their professional roles and priorities. Interestingly, however, only positive attitudes emerged from the stage 1 participants. This could indicate that they felt more confident about discussing these issues rather than committing them to paper, particularly as they were subsequently sent information on how their disclosures had been 'used'.

Taken as a whole, the low response rate causes some doubt about the representativeness of the stage 2 sample. This raises questions about the extent to which it is possible to generalise the findings to the professions of clinical psychology, counselling psychology and counselling as a whole, which should be considered when interpreting the results obtained.

Perhaps, a briefer measure with a mid-point rating would have raised response rates. However, this would have entailed sacrificing some of the depth obtained from the interview material. This raised a more general dilemma about how to combine qualitative and quantitative research methods without one becoming subsidiary to the other. The study used Rust and Golombok's model to convert qualitative themes into a quantifiable format. However, this was based on the author's own preferences, due to a lack of more general guide-lines about how to unite these methods in the existing literature. Ultimately, each of the manifestation areas developed requires investigation in its own right. In particular, personal values and their complex influence on professional practice appeared critical and it seems unlikely that this could have been done justice in a single measure.

Using a mixed method also raised philosophical issues. It could be argued that it is inappropriate to investigate the scientist-practitioner model using qualitative methods at all, given that they are not related to the empirical methods which underpin the foundations of the scientist-practitioner philosophy. For the purposes of this study, attempts were made to achieve rigour through the procedures of

auditability and respondent validation, which could be conceptualised in the Popperian notion of falsification (Popper, 1969). However, for more traditional proponents of the scientist-practitioner model who might place themselves on the closed end of the continuum developed in this study, use of a mixed method may be of questionable validity.

4.2 Discussion of results

The results are reviewed according to each of the different areas investigated.

4.2.1 Attitude towards theory

The qualitative interviews indicated that all participants regarded theory as an important resource in their work, regardless of professional allegiance. This appeared to be supported at stage 2, whereby participants from all groups were typically able to give examples of an occasion when they had made use of theory. However, there was no apparent relationship between duration of therapeutic practice and attitude towards theory, which had been predicted on the basis of the grounded theory analysis. One potential explanation for this is that the theory subscale of the ATRI was not sufficiently sensitive to identify the more subtle changes that occur over the professional life-span. In order to explore these patterns over time, a longitudinal design may be necessary to identify evolving perceptions more closely. It is also possible that the interviews and the ATRI measured subtly different types of information, making direct comparisons between the methods on this dimension, problematic.

The grounded theory analysis suggested differences between the professional groups on the influence of external factors on theory attitude, which were subsequently borne out by the quantitative analysis. As counsellors demonstrated greater influence of organisational or work-related pressures (reflected in their lower mean scores), it would suggest that this group may feel themselves to be more vulnerable

to external pressures in a way that they fear will hamper their therapeutic work. This is discussed further in the last section.

4.2.2 Attitude towards research

The grounded theory framework was useful in generating relevant hypotheses about research attitude. Clinical psychologists demonstrated the most positive research attitude. This may be a function of several factors including the nature of their training, greater or more positive experiences of research or a more implicit allegiance to frameworks such as the scientist-practitioner model. The counselling group indicated the least positive research attitude, with counselling psychologists occupying the middle position. These results appear to reflect the stated allegiance of counselling psychology to both the application of psychological principles and the profession of counselling (e.g. Woolfe and Dryden, 1996). The importance of professional allegiance on research attitude would also appear to be supported by the lack of differences between trainee and qualified therapists, suggesting that professional allegiance is a particularly strong factor in perceptions of research.

The significant impact of work setting also highlights the mediating role that working contexts can play on beliefs about research. One possible explanation for this, is that different work contexts may emphasis different channels of accountability. For those who work in the NHS, research may be perceived as having a regulatory function that is deemed to be important, regardless of concerns about its potential political role. This was supported informally by several non-NHS therapists in stage 2, who highlighted their lack of familiarity with the term 'evidence-based practice'. This raises questions about the different channels of accountability that may be used in non-NHS or combined work settings where the concept of 'evidence-based practice' may be less familiar. However, the high degree of association between professional allegiance and work setting indicates a need to interpret this finding with caution, as one may represent a confounding

variable of the other. Whilst this was not pursued statistically, it would be important to investigate this in subsequent research.

4.2.3 Attitude towards the scientist-practitioner model

Most participants were familiar with the scientist-practitioner model. This confirmed the relevance of looking at different professions' beliefs in this area, rather than restricting the study to exploring the views of clinical psychologists.

As with research, clinical psychologists had the most positive scientist-practitioner attitude, with counselling psychologists in the middle of both groups. Again, this appears to confirm the existing literature on the relationship of counselling psychology to other professions. The more positive attitudes demonstrated by clinical psychologists (both trainee and qualified), suggests that contact with the scientist-practitioner model through training and subsequent professional work does not necessarily lead to negative perceptions of it, as some of the literature seems to suggest. Indeed, for those who work exclusively in NHS settings, the scientist-practitioner model may permit role justification or containment of professional anxiety in the face of perceived competition with other related mental health professions.

The impact of work setting also suggested that positive attitudes may be associated with issues of containment and accountability. However, examination of the interaction between work setting and scientist-practitioner attitude suggested that professional group and work setting represent independent influences on scientist-practitioner attitude.

Significant differences also emerged in relation to how the model was defined. Whilst the definitions of the scientist-practitioner model generated by this study are clearly not exhaustive, they nonetheless highlight that individual practitioners are constructing their own definitions which fit with their own aims and philosophy of practice more closely than the original interpretation of the model. For most

participants, however, the missing component from the scientist-practitioner model was experienced as the more creative or artistic processes that therapists feel they bring to their work.

Re-ordering the definitions obtained from stage 1 along a continuum of closed- to open-ended alternatives proved useful. The more positive attitude obtained for definition 2 (E and A combined) suggests a bias towards the middle of the continuum, with more extreme closed or open definitions relating to beliefs about the model as less helpful. Nonetheless, if the scientist-practitioner model is differentially defined, questions remain about whether therapists fit what they do to the term or adapt the term to fit what they do.

4.2.4 Attitude towards formulation

Hypotheses 8 and 9 were not borne out, suggesting differences in the findings of the grounded theory analysis and subsequent statistical analysis. This suggests that beliefs about formulation are not influenced greatly by the clinical specialty in which people work. Formulations may therefore be perceived as a tool that relates principally to clinical work rather than representing a means or protection of accountability in the current climate. The lack of differences in formulation attitude according to the definition employed also suggests that there may be greater agreement about the definition of formulation than seems to be the case for the scientist-practitioner model.

4.3 Contribution of the results to the existing debate and issues for future research

In the current study, samples were small and so conclusions must be cautious. However, the results appear to provide support for Milne *et al.*'s (1990) argument that the scientist-practitioner model is being interpreted in a variety of ways. In addition, therapists' support for the model may be higher than often appreciated, although for reasons which are potentially quite complex. The results also confirm

Page's (1996) argument that organising the debate around a pre-existing definition without qualifying the philosophy of science from which therapists' own definition has been drawn, may obscure different approaches to therapeutic practice and the values which underpin them.

In contrast, the results indicate less support for the work of authors such as Potter (1982) and Dawes (1994) who argue that therapists typically regard theory and research as irrelevant to their clinical work. It would seem that whilst theory and research are not the only resources brought to bear upon therapists' clinical decisions, they remain valued sources of knowledge that enhance therapeutic understanding. However, what emerged from this study was a more complex process of integrating theory and research findings with one's own idiosyncratic philosophy of practice.

It would also seem that the American and Australian literatures, which apply the same arguments concerning the scientist-practitioner model to clinical psychologists, counselling psychologists and counsellors, are of questionable relevance to their British colleagues. The differences between professions in attitude towards research and the scientist-practitioner model observed suggest that the professions may use different guiding conceptual frameworks. However, whilst it seems plausible that the scientist-practitioner model represents a guiding conceptual model for clinical and some counselling psychologists it is not clear what frameworks counsellors are using. More direct examination of the frameworks of accountability and conceptual models which guide counsellors' beliefs about what they do in practice would be of interest.

It has been well-documented that attitudes do not necessarily predict behaviour (e.g Stahlberg and Frey, 1988). Whilst an argument has been made here for the importance of reviewing therapists' beliefs in a changing professional climate, results of this nature must ultimately be extended to an examination of how these

beliefs impact on what therapists actually 'do'. Any lack of significant differences between clinical psychologists and counselling psychologists, or counselling psychologists and counsellors on the areas investigated does not necessarily mean that the professional groups do not differ in the way they use these resources. Similarly, it could transpire that the scientist-practitioner model represents a theory that certain therapists hold about how they work rather than a model that has substantive implications in practice. The author hopes to contribute to these areas of enquiry in a future study.

The intuitive or creative aspects of practice were also identified. Whilst some were able to incorporate this within their own definition of the scientist-practitioner model, the quintessential nature of this creative side remains unexplored but may relate to other areas. For example, what kinds of experiences over the course of an individual's career influence whether this creative side develops? Does personality type represent a mediator of whether more intuitive functioning comes through? Does intuition stem from internalised theory? Understanding these more creative resources in therapy and the value which therapists place on them is currently poorly understood and would therefore be worthy of further investigation.

Ultimately, it seems that if it is important to see oneself as a scientist-practitioner, then the scientist-practitioner model may be redefined to create congruence with one's own values. In contrast, if it is not important to see oneself as a scientist-practitioner, or if the model is experienced as incongruent with one's own values, therapists may redefine what they do. It would seem that a lack of attention is still paid to therapists' values and their influence on practice. Some of these questions may be usefully investigated by retaining the continuum of definitions which may represent a useful framework for identifying the relationship with other variables such as associated philosophy of science, the encompassing of the reflective components of practice and an essence of enquiry.

4.4 Implications for training and professional practice

The results of this study raise a number of issues for training at pre- and post-qualification levels as well as issues for service organisation more generally. Firstly, if it is the case that different therapists interpret the scientist-practitioner model in different ways, then the professions which draw upon these terms need to address the range of interpretation in current use and consider more explicitly how the model is evolving or should evolve in order to meet the needs of professionals working in a changing professional climate.

It is also suggested that there may be a need for individual training schemes to identify more explicitly the scientific philosophy upon which their own scientist-practitioner training is based. For example, is it preferable to adhere to one model, associated with a particular philosophy of science or to encourage multiplicity through supporting trainees to develop definitions which are congruent with their own philosophy of working?

The results also suggest the need to take into account more explicitly therapists' values during the training process. Values appear to represent a critical mediator of attitudes towards the material to which therapists are introduced. It is possible that incongruence between the values of the individual and those of the broader training or organisational system can lead to additional stress which has the power to impact negatively on subsequent therapeutic work.

This would seem to be consistent with social psychological literature on dissonance theory (Festinger, 1957) which suggests that people behave in ways that avoid the tension associated with cognitive dissonance and are motivated to stabilise an existing attitude by selectively seeking information which confirms their view of the world. If theoretical or research ideas are introduced in such a way that is experienced as being incongruent with the therapist's values or philosophy or working, then these ideas will not subsequently be incorporated into post-

working, then these ideas will not subsequently be incorporated into post-qualification practice.

This places a heavy responsibility on training courses. However, it did appear to be borne out by this study. For stage 1 participants, there was a belief that research 'belonged' with certain types of questions: typically large-scale, experimental, group design studies. None of the participants spoke spontaneously of qualitative research or methods consistent with Sturme's (1991) notion of operating as a 'local clinical scientist' (such as service evaluation or single case design). Whilst this was not tested further during stage 2, it may indicate a need to reflect on how research methods are taught as philosophies of science evolve and the range of methods regarded as appropriate for the scientist-practitioner to use, expands.

These issues are of particular importance in the current climate of evidence-based health care. Firstly, the importance of values which emerged from stage 1 again suggests that if therapists are introduced to the concept of evidence-based practice in a way that is experienced as incongruent with their philosophy of working, they are less likely to develop a subsequent identity as an 'evidence-based practitioner'. This raises questions about whether the concept of evidence-based practice should be more actively introduced during training where opportunities for differentiating the clinically useful from the political could better equip therapists for the demands of the current health care climate.

Secondly, the fact that there were differences between the professional groups in their research attitude suggests that different professions may require different levels of managerial support in embracing the new research-oriented culture. For example, the finding that counsellors have a less positive research attitude could reflect a lack of familiarity with research methods or a belief that large-scale studies have little to offer therapeutic practice. However, difficulties with embracing the concept of evidence-based practice could lead to increased isolation from more

psychologically trained colleagues and in the longer-term cause the different professions to be differentially valued by commissioners who are increasingly basing their purchasing decisions on research evidence.

A further finding was that the scientist-practitioner model may be interpreted in different ways, which appears related to perceptions of its value. It is possible that there is a similar diversity of definition of evidence-based practice. Although not pursued here, it would be of interest to explore whether the term is interpreted in systematically different ways according to professional allegiance or work setting and whether this is related to the extent to which therapists find it a useful guide to therapeutic practice.

Use of the scientist-practitioner model as a potential 'buffer' against political and organisational challenges suggests that therapists' beliefs about the resources they have available to them are critically influenced by external factors. This raises questions about how theoretical and research needs are supported at post-qualification level.

The need for clear routes into continued professional development may be felt particularly strongly by counsellors, who seemed to emphasise the impact of external factors more than the other groups on their theory attitude. This may raise questions about the impact of the environment on counsellors' work more generally. It could be, for example, that there are elements to the training of clinical and counselling psychologists which provide greater protection against external pressures. Alternatively, it could relate to other areas of experience. For example, the measure did not set out to explore areas of stress in the different professions and it may be that stress for clinical and counselling psychologists is experienced as affecting their practice in different ways from counsellors.

A further possible explanation is that this difference reflects differential access to post-qualification training, counsellors' experience of greater professional isolation

or feeling undervalued in wider service contexts. Nonetheless, the apparent lack of different beliefs about theory could lead to a source of tension between the professions: namely beliefs that other professions are more different in their values than is actually the case which may lead to unhelpful misunderstandings of each other's perspectives.

Different professions may experience pressures in different ways according to the organisation in which they have been trained, the implicit values embodied in their profession and the guiding conceptual frameworks imparted to them through training, colleagues and more personal experiences. Identifying and responding to different sources of stress, values and beliefs represents a key challenge for the structure and functioning of departments and service organisation more generally. In summary, this study raises the possibility that theory and research are perceived by therapists to be more influential than often appreciated in the literature, although for reasons which are potentially quite complex. Whilst the scientist-practitioner model may require modification it is certainly not clear that it requires replacing.

5.0 CONCLUSION

The aim of the study was to explore therapists' beliefs about the scientist-practitioner model and the related areas of theory, research and formulation. By comparing the beliefs of clinical psychologists, counselling psychologists and counsellors, a number of differences emerged in relation to professional allegiance, work setting and the impact of external pressures. The results also suggest that contemporary interpretations of the scientist-practitioner model encompass a range of philosophies of working and beliefs about practice which need to be acknowledged and explored more openly as part of the existing debate.

Given the complexity of this area of enquiry and the inherent reflexivity of the author studying the beliefs of a profession of which she is a part, the study used a mixed method whereby qualitative and quantitative methods contributed equally to managing these complexities. This was an exploratory process but one which appeared to have some success, albeit based on quite small samples. Incorporating mixed methodologies more routinely in Health Service work may, therefore, enrich research enquiry in these and other complex areas of enquiry in the current NHS climate. In particular, more routine use of mixed methods may begin to close the presumed, and often erroneous, differences between the sciences of discovery and the sciences of implementation. It is hoped that this study represents a step towards the realisation of this goal.

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7.0 APPENDICES

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Appendix 1: Supplementary Work Sheet.

Addressing the Meta-Theoretical, Epistemological and Practical Concerns associated with Employing a Mixed Methodology

In reflecting on what would constitute the most appropriate methodology for this study, I found myself influenced by the comments of James (1994) who highlights the complexity of investigating professionals' beliefs about their work generally, and the scientist-practitioner model specifically. This would seem to be a function of two main factors: firstly, the emotive issues raised by investigating what professionals do (or purport to do) and also because of the inherent paradox of myself investigating a model of training and practice in which I have also been trained. Thus, a principal concern was how I address and somehow accommodate the inherent reflexivity for me, of investigating a profession of which I am also a part.

These early concerns led me to access the literature which attempt to address the meta-theoretical, epistemological and practical reasons for selecting 'qualitative or quantitative methods or a combination of both. My early impression of much of the literature was the extent to which qualitative and quantitative methods are typically dichotomised, either because they are conceptualised as fundamentally incompatible in their world view (e.g. Filstead, 1970; Henwood & Pidgeon, 1995), or because they are regarded as representing *alternative* (although not necessarily *competing*) world views, whereby choices are principally a matter of personal philosophy or preference (Hammersley, 1992). However, in the absence of any clearly-defined guide-lines about the grounds on which these choices should be made, the need to reflect on how one reaches a decision to use one methodology over another becomes crucial.

Reasons for incorporating a qualitative research methodology

Bryman (1988) suggests that choosing a qualitative method can be made both on technical or epistemological grounds. At the technical level, choice of method can be dictated purely by pragmatic concerns about which represents the most helpful way of investigating the problem in hand. For example, qualitative research has been identified as particularly useful where complex meanings of experience are being studied, where existing theory seems exhausted or where little information is available (Bryman & Burgess, 1994; Jones, 1995). Orford (1995) has also proposed that qualitative methods have an important function during the early, inductive stages of psychological research.

For the purposes of this study, the technical concern was important. From a review of the literature, I felt that there was a lack of in-depth understanding of therapists' attitudes towards the scientist-practitioner model and their beliefs about theory, research and formulation within the context of a changing professional climate. This suggested to me a lack of any pre-defined research questions that could be readily extrapolated from the existing literature and accordingly, the need for a method that could accommodate initial, more exploratory research questions.

Qualitative research may have an important role to play in investigating the impact of changes in the current NHS climate. As Pope and Mays (1995) suggest, qualitative methods may be particularly useful in looking at the perspectives of professionals, patients and managers during times of reform or policy change in the Health Service. As qualitative research methods are well-equipped to 'tap into' aspects of complex attitudes and behaviours that are influenced by the culture of those immersed in them, it would seem that they have an important role to play in NHS research.

At the *epistemological* level, the choice of qualitative research can also reflect beliefs about the generation of knowledge and the practice of science. Qualitative research places particular emphasis on the search for meaning and understanding attempting to make sense of phenomena in terms of the meanings which people bring to them (Henwood, 1996; McLeod, 1994). Based upon a constructivist epistemology, qualitative research emphasises the ways in which knowledge is generated through systems of socially constructed meanings, typically mediated by narrative and text. As Henwood & Pidgeon (1995) argue:

"the gathering of non-numerical data....frees researchers to explore, and be sensitive to, the multiple interpretations and meanings which may be placed upon thoughts and behaviour when viewed in context and in their full complexity" (p.115-116).

The epistemological dimension was also important for the purposes of this study. By appreciating the multiple interpretations and meanings within the context of my investigation, it became possible to reflect upon the reflexivity of the study in terms of my potential impact as a trainee clinical psychologist on more experienced colleagues in the same or related professions. This enabled me to think about the meanings generated between us as a function of our similarities and differences, both in terms of my own reflective work and as a process I could share with the participants themselves. Furthermore, I believed that as talking to professional colleagues about their attitudes, beliefs and therapeutic practice was a potentially sensitive area, a qualitative methodology would enable me to monitor the impact of the research process more closely.

Reasons for incorporating a quantitative methodology

In reflecting on the role of quantitative methods in this study, I also found myself thinking about practical and epistemological distinctions. Quantitative research in psychology has been premised on methods derived from the natural sciences, which emphasise the importance of 'objectivity' and the understanding of causal laws through the testing of experimental hypotheses. Thus quantitative research has been conceptualised as reflecting pre-determined assumptions about the world that carry an implicit power differential between the 'expert' researcher and the participant who is being studied (Henwood & Pidgeon, 1995). However, some of these assumptions do not consider the ways in which the philosophy underpinning quantitative methods has evolved in conjunction with meta-theoretical reconstructions of both the physical and social sciences (see Chalmers, 1982 and Manicas & Secord, 1983, for respective overviews).

Annells (1996), for example, has distinguished positivism from *post-positivism*, or *critical realism*. Whilst the positivist paradigm emphasises that reality, as a true state of affairs, can be ascertained through research (naïve realism) and that the researcher is independent from the 'researched', the post-positivist paradigm emphasises a reality beyond social constructed meanings which can be probabilistically, but not factually understood. Thus critical realism does not deny the role of inter-subjective, socially constructed meanings but argues that material-causal processes are implicated in other modes of construction which are independent of language use and the realities it creates. In this sense, Secord (1984) argues that causally constructed realities can create either enabling or constraining conditions for action, thus highlighting the importance of a scientific paradigm that encompasses the notion of free-will and self-interventions.

These arguments highlight that quantitative methods remain crucial to psychological research. Within a post-positivist framework, however, qualitative studies remain

important. The researcher pursues an accumulation of knowledge through modified experimental research but concedes that diverse viewpoints and contextual meanings are valuable. In this sense, contextually-bound methods are an important but not exclusive part of the causal picture. This suggests that dichotomising qualitative and quantitative paradigms without appreciating how each has evolved prevents a fuller consideration of how both may be usefully combined to generate fuller and broader understanding of a given area of enquiry.

There are also important practical reasons for incorporating quantitative research into this area of enquiry. Their strength lies in permitting generalisations beyond the immediate participant sample, coupled with an empirical rigour that cannot, by definition, be achieved by the more contextually-bound qualitative methods. This suggests that in order to understand therapists' beliefs and the factors that impact on these beliefs on a larger scale, the use of quantitative methods is critical.

Reasons for combining qualitative and quantitative paradigms

The realisation that meta-theoretical positions on quantitative methods have evolved raises new types of questions about how methods from the diverse paradigms can be combined. It is increasingly recognised that qualitative and quantitative methods are often complementary and that there are benefits from using them conjointly (Jones, 1995; Mason, 1994; Pope & Mays, 1995).

Hammersley (1996) has argued that one particular benefit of combining both methods is so that the respective weaknesses of each method can be ameliorated. For example, whilst quantitative research essentially neglects reflexivity or construes it as a hindrance to the research endeavour (Smith, 1996), qualitative research provides a direct means of focusing on this issue and legitimises it as appropriate concerns of the research process.

In contrast, whilst qualitative research attempts to address issues of rigour, procedures to establish more stringent reliability (consistency) and validity ('truth') are inevitably lacking, given the inherent emphasis on subjectivity and contextually-bound meanings. This indicates that in order to establish a greater understanding of the extent to which qualitative findings are relevant to individuals beyond the immediate sample requires the empirical strengths of quantitative methods. Pope & Mays (1995) have also argued that qualitative research often represents a precursor to good quantitative research. It can provide a description and understanding of situational behaviour as part of a multimethod analysis so that a given area can be explored on diverse levels.

I also found myself influenced by the arguments presented by Hammersley (1996) who highlights that the distinction between qualitative and quantitative methods is far from straightforward. Hammersley points out that in fact, much research does not fall neatly into either category and that there are multiple methodological dimensions upon which research varies. Thus both qualitative and quantitative research paradigms encompass a range of methods, techniques and meta-theoretical perspectives that makes methodological eclecticism to some extent inevitable. What is important about this inevitability, however, is that it is informed, rather than arbitrary.

Why grounded theory...

As Richardson (1996) points out, in qualitative research methods, there are no rules governing choice of one particular approach over another and there are many forms and variations of qualitative analysis. Within this context, choices about 'which

method' are dictated largely by the researcher's own preferences and philosophical positioning on the continuum.

For the purposes of this study, I felt that grounded theory would be a particularly useful choice. As Pidgeon (1996) observes, grounded theory expresses the idea of theory that is generated by, or 'grounded in', an iterative process involving continual sampling and analysis of qualitative data. The aim of the approach is to foster theory generation which can be subjected to subsequent analysis. Through methods of constant comparison, refining and expanding the initial coding system and integrating the emerging categories by creating links between them, the method ultimately achieves theory abstraction which can be extended to a broader framework of enquiry.

The emphasis on theory abstraction and generation indicates a concern with the extent to which the emergent categories relate to others beyond the immediate sample. Proponents of the method (e.g. Henwood & Pidgeon, 1995) explicitly address issues of subsequent field work to expand knowledge of the properties and limits of the emergent categories still further. The emphasis on testing the relevance of the framework to other groups beyond that of the immediate participant sample suggests a closer relationship with certain properties and concerns of quantitative methods than other qualitative methods and thus suggests that grounded theory could provide a springboard for subsequent statistical enquiry.

Concluding thoughts

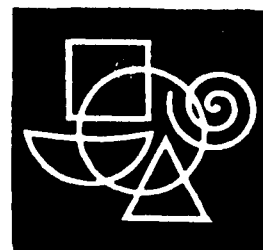
The philosophy of science and phenomenology are highly complex and I have felt myself become more absorbed in them during the course of this study. As a result, the above comments are only a summary my thinking about meta-theoretical issues underpinning the use of a mixed methodology.

My principle aim in uniting different research paradigms has been in the service of how best to do justice to the complexity of the material generated, to find a means of explicitly incorporating the reflexivity of the research process and yet to achieve a more rigorous breadth of understanding that is inevitably beyond the realms of contextually-based interview data. Achieving both depth and breadth is, I believe, critical in attempting to address professionals' beliefs about how they operate during a changing professional climate and to elicit themes and questions which feel relevant and important to professionals beyond the immediate participant sample. As Jones (1995) suggests, the establishment of an evidence-based culture in the current NHS must surely indicate the need for psychological research to draw on contributions from both traditions. It is this belief which guides my choice of method here.

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**SALOMONS
CENTRE**

Ms S Corrie
Trainee Clinical Psychologist
Salomons Centre

Dear Sarah,

Re: Ethics Approval
"The Role of Theory and Research in Clinical Practice: An Investigation of Practitioners' Perceptions of the Scientist-Practitioner Model according to Stage of Professional Development and professional Allegiance"

The Ethics Panel is pleased to provide full ethical approval for your research project. The Panel would, however, like you to make it clear in Appendix 5 that you will shred material and clearly indicate what you will do with the tapes to participants. Apart from these points the Panel were impressed with the thoroughness of the proposal and the way in which the ethical issues had been considered and taken into account.

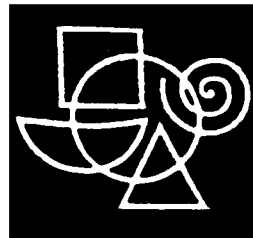
We wish you well with the project and would be extremely interested to see the results.

Yours sincerely,

Dr Tony Lavender
Chair of Ethics Panel

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**SALOMONS
CENTRE**

Dr A Lavender
Chair of Salomons Centre Ethics Panel
Salomons Centre

18 October 1996

Dear Tony

Re: Ethics Approval for *"The Role of Theory and Research in Clinical Practice: An Investigation of Practitioners' Perceptions of the Scientist-Practitioner Model according to Stage of Professional Development and Professional Allegiance"*

I would like to thank the Ethics Panel for granting full ethical approval for my research project.

In relation to the points raised concerning Appendix 5 (Consent Form for Stage 1 Participants), I would like to confirm that this has now been amended to include the following sentence:

"I understand that once Sarah Corrie has completed her data analysis, she will destroy any audiotapes used to record the interview and will also shred her verbatim and coded transcripts of the interview data."

Following our meeting on Thursday, 10 October, I understand that it is not necessary for me to resubmit the entire proposal and that this letter is sufficient to confirm that these changes have been made. I have, however, enclosed a copy of the amended consent form for your information.

Thank you again for your time and consideration.

Yours sincerely

SARAH CORRIE
Psychologist in Clinical Training

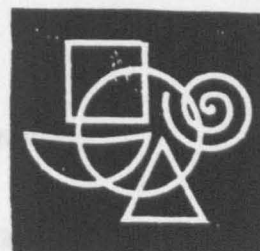
CC Dr Margie Callanan

Enc

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**SALOMONS
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Ms S Corrie
Trainee Clinical Psychologist
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22nd October 1996

Dear Sarah,

Re: Ethics Approval

"The Role of Theory and Research in Clinical Practice: An Investigation of Practitioners' Perceptions of the Scientist-Practitioner Model according to Stage of Professional Development and professional Allegiance"

Thank you for your letter of 18th October 1996. The Panel is pleased to see that you have carefully considered the points raised and wish you well with the study.

Yours sincerely,

Dr Tony Lavender
Chair of Ethics Panel

Appendix 3. Interview Schedule for Stage 1 Participants

Demographic features and background information:

Could you please start by telling me a bit about yourself and your professional background:

(areas to cover)

- how long have you been qualified?
- how long have you been working in this specialty or particular type of work?
- have you undergone more than one professional training?
- if yes, what do you regard as being your primary professional identity and why?
- how much research do you do (in its broadest sense, including service reports)?
- how much reading do you do, of academic journals, books or work-related material?

Personal Perceptions of Current Work:

1. Please could you tell me about your current work: including any aspects of clinical, research, teaching work in which you are currently involved.

(areas to cover:)

- what aspects do you value or enjoy?
- what aspects do you not value or enjoy so much?
- are you mainly involved in one area or work or are there many strands to your professional role?

(if mainly one area:)

- please could you describe this in some detail.

(if multiple strands to professional role:)

- how do the different elements of your work interact with one another (e.g. teaching, research, clinical work)?
- Are there are any aspects which cause conflict for you or are problematic to integrate at a personal level?

2. How do you see your current role in the profession?

(areas to cover:)

- what do you aim to achieve with your clients?
- perception of responsibilities to each group worked with?
- personal and professional aims?
- philosophy of working?

- professional identity?

Experiences of Practitioner training:

1. What was it about clinical psychology / counselling psychology / counselling training (as relevant to each participant's first training) that initially appealed to you?

(areas to include:)

- personal priorities?
- what were your professional priorities then (e.g. research, aspects of clinical work, etc.)?
- perception of eventual gain?

2. When you qualified were these initially appealing factors the same or different?

(If same:)

- please describe in more detail;
- what do you think helped to maintain them during the course of your training?

(if different:)

- why do you think they changed (with particular reference to events or processes of professional development that may have affected this change)?
- what spurred you on to continue in the profession?

3. When you were training, were there any key figures that influenced you positively or negatively?

(if yes:)

- In what ways did they influence you?

4. When you were training were there any incidences of teaching or supervision you had that helped you make sense of, or 'digest' a particular theoretical/technical literature?

5. When you were training, were there any experiences of supervision or teaching that made theory or research come alive and feel relevant for you?

(if yes:)

- how do you think this experience impacted on your subsequent professional development?

6. When you were training, were there any experiences of supervision or teaching that made theory or research feel remote or irrelevant to your work?

(if yes:)

- how did you make sense of this experience?
- how do you think it affected you personally?
- how do you think it affected your work?
- did you try to resolve this experience or not? If so, how?

7. How, if at all, do you think your practice has evolved over time?

Role of theory and Research:

1. Can you tell me about a specific time when you used a particular theory to make sense of a situation a client was in - either for yourself or for them?

2. Are there any theoretical models or techniques derived from theoretical models that you use occasionally or regularly?

3. Can you tell me about a time when you were working with a client in a situation that felt beyond your immediate understanding?

- how did you attempt to cope with the situation?
- what resources did you bring to bear to help you make sense of the client's circumstances (personal, theory, research, supervisory)?

4. Can you tell me about a research finding or area of research that influenced your own clinical work, however directly or indirectly?

(areas to include:)

- what was the research?
- how did it affect the way you made sense of a client's situation?
- how did it affect your practice with them?

5. (Read to participant:)

"Clinical practice can give rise to a whole range of dilemmas and challenges according to both the client's and the therapist's circumstances, stage of training, way of working and so on. I am wondering if there have been

any such situations for you, that you would feel OK about sharing with me?"

(include references to:)

- what happened?
- how you dealt with the situation?
- if the experience affected your practice in any way?
- if it altered your perception of the role of theory and research in any way?
- discuss in relation to cases that went well or not so well (what are the similarities and differences?).

Formulation:

1. Is the concept of clinical formulation a process with which you are familiar (either in your previous training or now, as a qualified practitioner)?

(if yes:)

- could you describe what you understand formulation to be?
- has your use of formulation changed over time? If so how?
- include: conscious choices to change and reflections on more unconscious / tacit dimensions of change;
- presence or absence of this way of working that has evolved over time.

(if no to formulation:)

- How would you go about making sense of a client's situation (include reference to predisposing, precipitating and maintaining factors)?
- Would you ever, within the context of your clinical work, think about or draw upon theory or research findings?
- If so, how would you attempt to integrate theory and practice and research and practice within the context of a particular client's situation (give example to clarify, if this helps)?
- Can you give any specific examples of this?
- What other elements of your experience (theoretical, professional or personal) would you often find yourself drawing upon to help make sense of a client's predicament?

2. What advice would you give to a novice in the field, about to undertake their first clinical / counselling training, to help them maximise their training opportunities?

(discuss in relation to:)

- use of theory;
- use of research findings;
- influence of peers;
- influence of tutors, supervisors and admired figures in the field of practice, research or other sources of personal development;

The Scientist-Practitioner Model:

3. If I was to mention the concept of 'the Scientist-Practitioner Model', would this be a concept with which you are familiar?

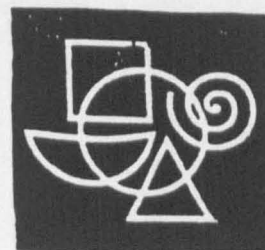
- If yes, what do you understand this term to be?
- Would you differentiate it from the concept of evidence-based research and if so, how?

(discuss with participant list of operational definitions, to facilitate further discussion)

4. If we were to talk about practice more generally, what, do you think, are the factors that will lead a practitioner to make more or less use of the Scientist-Practitioner Model in terms of the contexts and dilemmas that clinical practice gives rise to?

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SALOMONS
CENTRE

PRIVATE AND CONFIDENTIAL

18 October 1996

Dear Mr

You may remember me from my undergraduate days at . I was among the first year of undergraduate students to undertake the BSc in and in our second year, you came to talk to us about the emerging field of counselling psychology. More recently, when I began working as an assistant psychologist following my graduation from , you were kind enough to talk to me when I sought some guidance on my future professional development. It is, however, for a slightly different purpose that I am contacting you now.

I am currently undertaking some research as part of my doctoral degree in clinical psychology and I wondered if you might be interested in taking part. With this in mind, I have taken the liberty of outlining some of the details of my research and why I have identified you personally, as someone who may be interested in participating.

About my research....

I have a long-standing interest in practitioners' perceptions of the role of theory and research in their clinical work and the context that has given rise to concepts such as 'the Scientist-Practitioner Model' and 'evidence-based practice'. I am also interested in the difficulties to which theory-practice and research-practice links give rise and the literature that has rejected the Scientist-Practitioner Model as an inappropriate guiding conceptual framework for therapeutic practice.

I believe that there are several important implications of my research. Firstly, the critical perspective adopted by some contemporary scholars towards the Scientist-Practitioner Model and models which purport to be based on theoretically-driven principles, raises concerns about the most appropriate models of training for practitioners and concurrently issues of professional identity. Of particular importance, however, the debate illustrates the need for a more adequate understanding of therapeutic practice. A first step towards this aim would be to describe how the use of theory and research is articulated by a diverse range of therapeutic professions.

I also believe that there is a need for greater cooperation across professional disciplines, but currently no guiding conceptual framework for exploring what the nature of this cooperation should be. In response to a practitioner climate where purchasing, cost-efficiency and quality assurance are key preoccupations, professionals and purchasers can

be coerced into making unhelpful and inaccurate judgements about the practice of related professions. The aim of this research is therefore to contribute towards uniting practitioners around common themes and dilemmas and also to explore how professions can complement one another more appropriately.

Thirdly, research of this nature has implications for practitioner training. A greater understanding of the role of theory and research, as perceived by practitioners at different stages of their professional development, would contribute to an identification of the particular strengths of each professional training and how training in theory and research can be maximised to the benefit of both trainees and their clients.

What your contribution would be, as a participant....

Given the complex nature of what I wish to investigate and the inherent reflexivity in thinking about aspects of one's own practice, your contribution as a participant would involve us meeting and spending approximately an hour and 30 minutes discussing aspects of the use of theory, research and formulation both at the levels of abstract examples and also asking you to share with me aspects of your personal experiences of training and professional practice.

Although I have some specific questions that will act as a guide to our discussions, I anticipate that the research process will constitute a dialogue, rather than a formal, structured interview and will allow us to share our thoughts and perceptions with each other: both concerning the subject matter, but also about the research process itself.

My personal perspective....

My hope is to interview professionals from the fields of counselling psychology, counselling and clinical psychology about their therapeutic practice and the theoretical and philosophical values which underpin it. As someone who has contributed so much to the emerging profession of counselling psychology and who has influenced my own professional development, it would be a great pleasure for me if you would consider participating.

Whilst I appreciate that the relationship between counselling psychology and clinical psychology has often been ambivalent, I would like to assure you that my intention is not to make unhelpful comparisons or to judge the activities of different professions. My own background in counselling psychology and interest in pursuing a statement of equivalence has left me very aware of and, I hope, sensitive to, the pressures to which inappropriate comparisons can give rise.

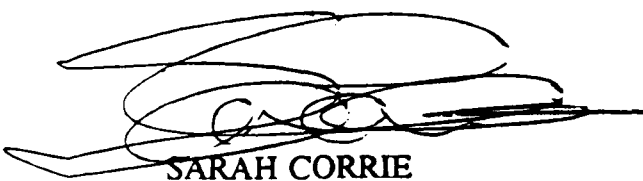
I do hope that you might be interested in hearing more! If I do not hear from you within three weeks, I shall assume that I have your permission to contact you by telephone to discuss the matter further and explore with you whether you would be interested in participating.

If, in the meantime, you would like any additional information, please do not hesitate to contact me. I can be reached at the above address or on the following telephone numbers:

(every evening and 24 hour answer machine);
(Mondays - Wednesdays);
(ask for Psychology) most Fridays.

Thank you for taking the time to read my letter and I hope to speak to you soon.

Yours sincerely



SARAH CORRIE
Psychologist in Clinical Training

Appendix 5. Consent Form for Stage 1 Participants

Title of Research Study:

The Role of Theory and Research in Clinical Practice: An Investigation of Practitioners' Perceptions of the Scientist-Practitioner Model according to Stage of Professional Development and Professional Allegiance.

Investigator: Ms Sarah Corrie

I (name):

of (work address):

hereby consent to take part in the above study, the nature and purpose of which has been explained to me. Any questions I have had concerning the nature of this study, or its aims and method have been answered to my satisfaction.

In addition, the following specific items have been explained to me:

1. that my anonymity will be preserved and that any historical or autobiographical information I may reveal during the course of this interview, concerning my professional beliefs, practices or previous training that could lead to my identification will be withdrawn from subsequent stages of the research.
2. that Sarah Corrie, the Investigator, will, within four weeks of the interview, send me a transcript of our discussions which I will verify for its accuracy. This will be a coded version of our interview which reflects the Investigator's thoughts and perceptions of important themes and categories which emerged during the interview. I understand also that I will be invited to comment on these drafts and will be contacted by Sarah Corrie again, in this regard.
3. I also understand that I am under no obligation to continue with the interview and that if I wish to withdraw at any stage, I may do so without necessarily providing a reason.
4. This interview may / may not be audiotaped for subsequent data analysis (*please delete as appropriate*).
5. I understand that once Sarah Corrie has completed her data analysis, she will destroy any audiotapes used to record the interview and will also shred her verbatim and coded transcripts of the interview data.

Signed: **Date:**

LIST OF OPERATIONAL DEFINITIONS FOR STAGE 1 PARTICIPANTS

SCIENTIST-PRACTITIONER MODEL:

There are several definitions of the scientist-practitioner model. The 'classic' definition proffered by Barlow, Hayes & Nelson (1984) refers to "*...a clinician or practitioner who can not only directly assist people with their problems, based on knowledge developed with his or her profession, but also contribute to our collective knowledge, thereby improving our practice.*" (p.xi). Milne, Britton & Wilkinson (1990) reinterpret Barlow *et al.*'s definition as referring to "*...clinicians who draw upon or contribute to research in relation to their work*". They also break the concept down into different subsections: 'production', 'consumption', 'utilisation', 'motivation', although the validity of this 'looser' definition has been contested by other authors (Head & Harmon, 1990).

EVIDENCE-BASED PRACTICE:

This refers to whether practitioners overtly use evidence of efficacy to guide their practice and could include any incidence of practice that is informed by research findings that could, potentially, be atheoretical. Some examples of this include service provision that have been implemented following careful evaluation (empirical or otherwise) and changes in practice following (for example) a consumer satisfaction survey. Other examples include (1) many aspects of intellectual functioning as measured on tests such as the WAIS-R and (2) links between mental health problems such as depression and environmental conditions (correlational studies) that may not have any clearly defined theoretical basis.

THERAPEUTIC ORIENTATION

For the purposes of this research, this term will be used to refer to the main therapeutic schools with which participants feel they identify. An individual using multiple theoretical approaches may, for example, refer to themselves as 'eclectic', 'integrationist' or 'pan-theoretical'.

THEORY

In its broadest sense, one possible definition of theory is "A complex set of interrelated statements which attempt to explain certain observed phenomena" (p.21; Gross, 1987). This will inevitably be bound in time, with some theories becoming superseded by more contemporary developments (arguably psychoanalysis and the Object Relations theories it gave rise to, as well as more recently, brief psychodynamic psychotherapies). The same could be said of cognitive therapies with increasing emphasis on schema-focused work and the application of cognitive principles to psychotic patients).

MODEL

More linked to Kuhn's notion of 'paradigm' (e.g. Kuhn, 1970) and thus may contain a number of theories as a broad umbrella term. This could potentially be independent of therapeutic orientation: e.g. use of specific models from cognitive, developmental or social psychology - or also sociological work - to 'pull together' strands of a client's experience. Their use may stem from practitioners' broader psychological training, such as knowledge acquired during undergraduate psychology degrees.

Appendix 7: Post-interview information sheet

(read aloud to each Stage 1 participant at the end of the interview):

"Thank you very much for your time and participation. I shall be in contact with you within the next four weeks when I will send you a coded version of this interview which represents my perceptions, impressions and thoughts about the issues we discussed.

If you have any comments in the meantime, I can be contacted on (01892) 515 152 and hope that you will feel free to telephone me if you would like to discuss any aspect of this research in greater detail. If I don't hear from you sooner, I shall telephone you in six weeks in the hope that you will have had time to read through the transcripts and will have some comments".

Appendix 8. Examples of the Initial Codes Generated from the Grounded Theory Analysis

Examples of the initial codes which emerged from analysing the eight interviews are listed below and grouped under the broader headings of the emerging categories.

Emerging Categories for Theory

a. Important for effective practice

Necessary to use to be effective
Helps make sense of 'symptoms'
Helps develop clinically-relevant hypotheses
Seeing clients' distress in the broader context
Informs decisions about clients' needs

g. Framework for communicating ideas

Influence of theory on language we use
Advances client's self-understanding
provides containment for client
developing a shared language with professionals
Use of theory in a 'jargon' way frustrates communication

i. Complex role in practice

Use of theory isn't always explicit
Theory often underpins therapeutic 'risk-taking'
Theory becomes internalised to create a 'fit' with preferred way of working
Impact of therapist's own stage of life on which theories feel most important
Theory as a primary informer amongst different strands of experience

Emerging Categories for Research

c. Self-discipline

Yardstick against which to judge intuition
Fine-tunes clinical thinking
Should determine which intervention you try first
Not easy to apply research findings (takes effort)

Appendix 8 (continued)

f. Research as communication about professional role

Being different from other professions
 Showing the world your services are effective
 Clinical psychologists have research skills
 Using our research skills to demonstrate 'uniqueness' of own profession vs
 research isn't part of our profession

g. Political role of research

Political motivations for undertaking research
 Funding implications for services
 Current role in NHS
 A means of professional survival

Emerging Categories for the Scientist-Practitioner model

a. Restricting

Inaccessibility
 Associated with statistics
 Cannot inform a clinical encounter
 Implies (erroneous) objectivity
 Doesn't allow for creative/intuitive aspects of practice

b. Diverse interpretations

No single definition
 Has changed over time
 Means different things to different people
 'Validity' of different interpretations
 Need to develop own 'user friendly' version

d. Spirit of enquiry

Represents an 'essence' of professional practice
 Standards
 Systematic approach to help us clarify why we use a particular therapeutic
 technique/model
 Important within the context of accountability
 Protection (for profession and public)

Appendix 8 (continued)

Emerging Categories for Formulation

d. Synthesis of different forms of knowledge

Integrates theory and research in the service of
a client's needs
Involves different levels of thinking
Links discrete chunks of information
Means of integrating theory and intuition

f. Impact of working context

Increased emphasis on brief interventions in some
services leads to more 'why now?' questions
Formulations are different in primary care
Varies according to client group
Different work settings require different types of
formulation

h. Client empowerment

Who owns the formulation?
Formulation as client empowerment
Re-telling the story to repair the damage
Therapist as 'midwife' to client's formulation
Therapist shouldn't impose understanding prematurely

Due to lack of space, the initial codes shown here are examples only. A full list is available from the author, on request.

Appendix 9. Examples of Abstract Definitions Generated from the Core Analysis of the Grounded Theory

Examples of the abstract definitions generated from the core analysis of the grounded theory are shown below, grouped under the four broad areas of enquiry in the study (namely, theory, research, the scientist-practitioner and formulation).

Abstract Definitions for Theory Categories (examples)

1. Framework for exploration (category c)

This category referred to one of the many functions of theory in practice, namely facilitating areas of exploration in the therapeutic process. This included pursuing certain questions or routes of enquiry during the assessment phase that are informed by theoretical knowledge, and how intuitive sensing of a client's needs or difficulties could be more systematically explored through use of theoretical frameworks. In this sense, theory often represented an 'anchor' for grounding more intuitive forms of knowing.

2. Changes in use of theory over time (category k)

The changing use of theory over time referred to the multitude of ways in which attitudes towards, and use of theory evolved as a function of on-going therapeutic practice and other areas of personal or professional experience. Encompassed within this definition, was a sense of experience bringing with it a loosening of rigid theoretical rules acquired during training and the impact of one's own life-stage on theoretical influences (for example, for one participant, greater current interest in existential theory as a result of their present life stage).

Abstract Definitions for Research Categories (examples)

1. Professional responsibility (category a)

The category referred to the need to take account of the available research evidence as part of working in a way that was responsible and ethical. There was a belief that in therapeutic practice, professionals are often on the 'edge' of knowledge and there is, therefore, a need to respect what is not known or fully understood. In this sense, research was regarded as one potential means of refining understanding of practice-related phenomena that could mediate the tension between being on the 'edge' of knowledge and still needing to intervene in a responsible way.

2. Political role of research (category g)

This category was defined as the recognition that research evidence was often used in the service of organisational and broader political goals that were not directly associated with clinical work. These goals could include use of research evidence to guide managerial decisions about which services to purchase or fund or where to make cuts in service provision. Broader trends, particularly in the NHS were also referred to, such as changing philosophies and preoccupations in the current health

care climate and the emerging of new terminology (such as 'evidence-based practice') which reflect these broader political aims.

Abstract Definitions for Scientist-Practitioner Categories (examples)

1. Spirit of enquiry (category d)

The scientist-practitioner model here, referred to a spirit of enquiry which was believed to embody certain principles and qualities of good practice that are not necessarily linked to any particular body of scientific knowledge or scientific paradigm. In this sense, being a scientist-practitioner model was less about adhering to a model and more about a quality of questioning and the values which underpin it that was believed to contribute to a framework for responsible and effective practice.

2. Hallmark of identity (category g)

This category seemed akin to 'ownership' of the scientist-practitioner title (i.e. who was entitled to call themselves a scientist-practitioner and who did not regard this as an appropriate identity for themselves). In this sense, the scientist-practitioner model was typically regarded as closely associated with the (unique) identities of clinical psychologists by both clinical psychologists and counsellors. This could be construed as either a good or a bad thing. For some, the scientist-practitioner as a hallmark of identity was regarded as positive, denoting 'uniqueness', whereas for others, it was a label that had been inappropriately 'clung to' in challenging professional times.

Abstract Definitions for Formulation Categories (examples)

1. Impact of working context (category f)

This category was defined as the recognition that the processes and outcome of formulation could appropriately vary as a function of the work setting in which therapists were operating. For therapists working in settings which emphasised short-term work and high turn-over rates (such as primary care) it was recognised that formulation may necessarily consist of more present-focused questions. In contrast, where therapists were working in settings where contact with clients was longer-term, it was also appreciated that the activities comprising formulation may vary to reflect the longer-term nature of the work or goals set.

2. Client empowerment (category h)

Formulation was defined in this category as a vehicle for client empowerment during the course of therapy, in which the client, as well as the therapist, could come to better understand their needs and difficulties. For some participants, this indicated that the therapist should not 'impose' a formulation (story) on the client too quickly and that alternative formulations (stories) should always be considered, particularly if these feel more helpful for the client.

Due to lack of space, the abstract definitions shown here are examples only. A full list is available from the author, on request.

Appendix 10a. Feedback Form for Stage 1 Participants

Title of Research: The Role of Theory and Research in Clinical Practice. An Investigation of Practitioners' Perceptions of the Scientist-Practitioner Model according to Stage of Professional Development and Professional Allegiance.

1. Please could you comment on the content of the coded transcript. In particular, do you agree or disagree with the analysis?

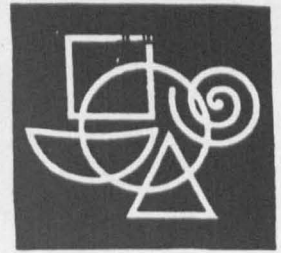
2. Do you have any further comments or thoughts about the research, either in relation to its contents or your experience of the process of the research?

3. Would you be willing for me to quote material from your interview (with my ensuring that your anonymity was preserved and that any characteristics which could lead to your identification are omitted?)

Many thanks for completing this form.

Salomons Centre
David Salomons Estate, Broomhill Road
Southborough, TUNBRIDGE WELLS
Kent TN3 0TG

Telephone: 01892 515152
Fax: 01892 539102



SALOMONS
CENTRE

PRIVATE AND CONFIDENTIAL

Dear

Thank you very much for your recent participation in my research and for your valuable contribution. As we agreed, I have enclosed a coded transcript of our interview which summarises what I feel were the main themes that emerged from our discussions.

Information on the data analysis...

I thought it might be helpful for me to provide some background information on how I arrived at the categories illustrated in the coded transcript. In order to explore the rich data obtained in our interview, I used a Grounded Theory approach to qualitative data analysis. In summary, the process entailed dividing the material into paragraphs and then selecting material from the text which I considered relevant to each of my research questions. Through a constant process of reading the text to familiarise myself with its complexities and making comparisons between different sections, I sorted each section of text into initial headings which, as the analysis expanded, grew into the categories that are illustrated in the coded transcript.

As you know, I have conducted several other interviews which will subsequently be encompassed into a broader indexing system and include additional stages of analysis. However, the coded transcript I have enclosed represents your contribution only, so that you are truly in a position to comment on how well you believe the coding system arrived at represents your experience of our interview. In order for me to incorporate your experience of the research and your perceptions of my categories to represent it, I would be extremely grateful if you could read the coded transcript and give any comments you may have on the form provided.

It is also possible that when I come to write up the research, I may wish to use quotes from your interview which illustrate the general themes but which are presented in such a way as to ensure your anonymity. I would therefore be grateful if you would indicate on the form whether I have your permission to do so. If you

Also at: First Floor, 14 Warren Yard, Warren Farm Office Village, Stratford Road, Wolverton Mill, MILTON KEYNES MK12 5NW

are in any way uncertain about my proposed use of the material, please do not hesitate to contact me so we can discuss the matter further. If I do not hear from you within three weeks, I shall assume that you have no particular comments about the interview, agree broadly with my analysis and are happy for me to quote material from the interview.

Finally, I have enclosed a form which you should complete and return to me if you would like a copy of the results. I anticipate that the results will be available next Autumn.

My feelings about the work we did together...

I feel that my letter would be incomplete without my commenting on what the process of the research has felt like for me and communicating some of my sense of what has, I hope, been a shared experience. Perhaps my experience is summed up most accurately by a reference to qualitative research as a process in which the researcher doesn't only 'affect' but is also 'affected by'. I thought I had some sense of what this meant. However, having the opportunity to talk to you about your practice has caused me to revisit my own values and beliefs about what I do and why I do it. I have been 'affected' at a deeper level than I had initially anticipated I would be.

I am also aware that doing this research may well be the only time that I am in the privileged position of interviewing practitioners who have influenced me, about their work and the personal philosophies and value systems which underpin it. It has been a privilege to be part of a process in which you clearly felt able to share your perceptions and beliefs with me: a process which has caused me to reflect once more, upon my own values, experiences of training and the sort of practitioner I aspire to be. I know then, that I will continue to learn from our interview well beyond the deadline for my dissertation! My sincere thanks for all your time and support.

Finally, I would be delighted if you would like to keep your copy of the coded transcript as a summary of the work we did together. I hope you will appreciate, however, that if you do decide to keep it, I must ask you to accept responsibility for its safe-keeping. If you do not wish to keep the transcript, please return it to me and I will shred it, as agreed in the consent form you originally signed.

If in the meantime, there is anything you wish to discuss in person, please do not hesitate to contact me again.

Many thanks for all your support.

With best wishes

Yours sincerely

SARAH CORRIE
Psychologist in Clinical Training

Appendix 11a. Definitions of the Scientist-Practitioner Model provided in the ATRI (Re-Ordered along a Closed- to Open-Ended continuum)

The definitions of the scientist-practitioner model provided in the ATRI were reordered along a continuum of closed to open-ended definitions as follows:

1. (most 'closed') The model is associated with a particular model of science that emphasises prediction and control and the use of statistical testing and essentially excludes a direct consideration of the exploratory and intuitive aspects of professional work (F).
2. A model of working that implies a relationship between research and practice which relates principally to cognitive or behavioural approaches but which has less relevance to more exploratory therapeutic approaches which emphasise the therapeutic relationship rather than technical skill (B).
3. A model which emphasises data collection and hypothesis testing to allow a therapist to examine whether there is evidence to support what they are doing in practice and which can then inform the therapist's thinking around therapeutic issues (C).
4. A model which emphasises the need to prove the efficacy of what you do in practice (H).
5. A term which refers to someone who carries out both scientific research and therapeutic practice as part of their professional role. These activities can be quite separate from one another and there is not necessarily a mutual relationship between their research and practice-related activities (E).
6. Therapists who draw upon or contribute to research in relation to their work. Research in this sense can refer to a range of activities including producing research (undertaking and publishing), reading research (consumption), applying research to practice (utilisation) and the motivation to apply research findings to one's practice (A). ●
7. A practitioner who cannot only directly assist people with their problems, based on knowledge developed with his or her profession but who can also contribute to a collective knowledge that can improve our practice (D). ◆
8. A model which emphasises the necessity of being reflectively critical about one's work and the need for an integrated approach to knowledge which recognises the interdependence of theory, research and practice (I).
9. (most 'open') A model which captures a spirit of enquiry whereby psychological evidence can be used in the service of understanding a client's difficulties whilst retaining a sense of the client as a unique individual (G)

The preferred definitions of trainee and qualified participants in each professional group were then arranged graphically (see overleaf):

.....
 ◆ = well-established definition, taken from Barlow *et al.* (1984)
 ● = alternative definition, taken from Milne *et al.* (1990)

**FIGURE 5. RANKED PREFERENCES IN THE DEFINITION OF THE SCIENTIST-PRACTITIONER MODEL:
FIRST, SECOND AND THIRD MOST POPULAR DEFINITIONS SELECTED BY TRAINEE AND QUALIFIED
THERAPISTS IN EACH OF THE PROFESSIONAL GROUPS**

CLOSED						OPEN		
N=6	N=7	N=40	N=2	N=5	N=44	N=8	N=40	N=31
1	2	3	4	5	6	7	8	9
		1. Clinical Psychologists (Q) (N=16)		3. Counsellors (Q) (N=3)	1. Clinical Psychologists (T) (N=25)	3. Counsellors (Q) (N=3)	1. Counselling Psychologists (T) (N=5)	1. Counsellors (Q) (N=6)
		1. Counsellors (T) (N=2)			2. Counsellors (Q) (N=5)		1. Counselling Psychologists (Q) (N=11)	2. Counselling Psychologists (T) (N=3)
		2. Clinical Psychologists (T) (N=16)			3. Clinical Psychologists (Q) (N=7)		2. Clinical Psychologists (Q) (N=9)	2. Counselling Psychologists (Q) (N=7)
		2. Counselling Psychologists (T) (N=3)			3. Counselling Psychologists (T) (N=2)		2. Counsellors (T) (N=1)	2. Counsellor (T) (N=11)
					3. Counselling Psychologists (Q) (N=5)		2. Counsellors (Q) (N=5)	3. Clinical Psychologists (T) (N=11)
							3. Counsellors (T) (N=1)	3. Counsellors (T) (N=1)

NB: The N sizes above the continuum illustrate the total number of participants who selected that definition of the scientist-practitioner model as most closely approximating their own. Information below the line illustrates the order of the definitions in terms of the first, second and third choice for each professional group. Trainee and qualified therapists' choices are listed separately, as follows: (T) = trainee therapist (Q) = qualified therapist.

Appendix 12a: Definitions of Formulation provided in the ATRI (Re-Ordered along a Closed- to Open-Ended continuum)

The definitions of formulation provided in the ATRI were reordered along a continuum of closed to open-ended definitions as follows:

- 1. (most 'closed') Formulation refers to the challenge of arriving at a psychological conceptualisation of 'when, why, how'-type questions concerning the client's difficulties and what has brought them to see you at this point in time (D).

- 2. Formulation refers to a statement about how a client's problems are understood during or after the initial assessment phase. It emphasises the linking of psychological thinking with therapeutic practice and entails conceptualising a client's problem using one or more psychological models (C). ●

- 3. Formulation refers to the therapist's understanding of the chronological or developmental sequence of events which has led to the client developing the problem for which they are now seeking help. Understanding of this sequence can in turn inform a set of hypotheses about the 'here and now' factors which may be maintaining the client's difficulties (A).

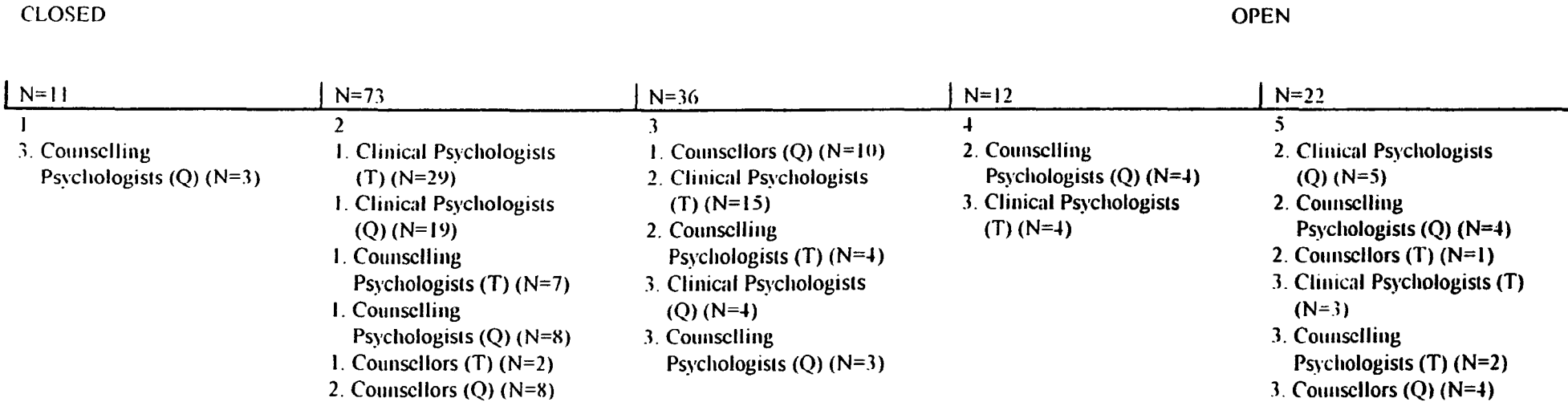
- 4. Formulation represents arriving at a story of the client's history. The aim of formulation is to get people in touch with their stories in a way that is experienced as empowering. It aims to achieve a synthesis of information about their personal history, theoretical ideas and research findings, where relevant (E).

- 5. (most 'open') Formulation is a process which can refer to a range of activities in the therapeutic context. At one extreme, it can be a simple question or statement about a key issue that allows you to reflect on and explore further with the client an area of potential significance. At the other end of the spectrum, formulation can represent a complex theoretical analysis of a client's problem (B).

The preferred definitions of trainee and qualified participants in each professional group were then arranged graphically (see overleaf):

.....
● = definition of formulation established at one clinical psychology training scheme (refer to Carter, 1994)

FIGURE 6. RANKED PREFERENCES IN THE DEFINITION OF FORMULATION: FIRST, SECOND AND THIRD MOST POPULAR DEFINITIONS SELECTED BY TRAINEE AND QUALIFIED THERAPISTS IN EACH OF THE PROFESSIONAL GROUPS



NB: The N sizes above the continuum illustrate the total number of participants who selected that definition of formulation as most closely approximating their own. Information below the line illustrates the order of the definitions in terms of the first, second and third choice for each professional group. Trainee and qualified therapists' choices are listed separately, as follows: (T) = trainee therapist (Q) = qualified therapist.

Appendix 13. Form Detailing Reasons for Non-Participation

If you made the decision *NOT* to participate, please read on.....

If you decided *not* to participate in this study, it would be very helpful if you could take a minute to complete this form indicating what led you to make that decision. This will give me valuable information on the way I have designed my study and enable me to gain more of an understanding about what may prevent people from taking part in a study of this nature. Your response will also help me consider some of the factors that prevent people from participating in surveys in psychological research more generally.

Please indicate which of the following factors led you to decide *not* to participate in this study:

1. lack of interest in the area being investigated:
2. work-related pressures:
3. The way the research has been designed: i.e. a survey instrument rather than an alternative form of data analysis (if so please specify):
4. The length of the survey instrument:
5. Other (please specify; this may include any combination of the above factors):

Thank you for completing and returning this form.

Appendix 14. Summary of reasons given for non-participation

A request was made to individuals who had chosen not to complete the measures to indicate why they had reached this decision. It was explained that this would not only provide valuable information on the design of the current study but would also allow the author to speculate on some of the more general factors that might prevent people from participating in questionnaire-based research. Following a brain-storm with the author's research supervisor, a number of potential impediments to participation were identified (see Appendix 13).

Sixty-one participants responded to this request, providing numerous reasons for not participating. These are summarised below, with some of the themes illustrated by participants' statements.

1. Lack of Interest (N=4)

"I find this subject rather boring."

"I think this whole area is just a waste of time...when there are so many real problems that need addressing."

2. Work-related or domestic pressures (N=10)

"Sorry, just not enough time to do full justice to your work - i.e. pressures of work and family matters, etc. before two weeks annual leave."

"I am current in my second year of my MA and am under enormous pressure to complete written work for qualifying requirements. Given the thought required for answers, I feel prevented from participating. This looks important/worthwhile. Good luck."

3. Design of the study (N=2)

"When I've done research, I've found that the personal approach is better than a cold mail shot (not that you seem cold but that you're sending the request form cold!)"

"I would have preferred a telephone conversation or interview."

4. Length of the Survey Instrument (N=3)

"I regret that I do not wish to spend such a large amount of time on this."

5. 'Other' (N=16)

This category encompassed a range of reasons for non-participation, which included the following:

5.1 Multiple requests to participate in research (N=2):

"I receive 15-20 investigations like this EACH WEEK. I simply cannot afford the time to complete them." (emphasis in original)

5.2 No longer practicing (N=3):

"I have retired due to ill-health."

"I'm not currently practicing."

5.3 Inapplicable/irrelevant to professional role/status (N=11):

"A lot (of what you're asking about) doesn't seem relevant to my model of working, as a counsellor."

"The questionnaire is pitched above my level of understanding."

"I'm a chartered counselling psychologist, but am not employed as such."

5.4 Personal Pressures/stress (N=1):

"Your questionnaire arrived at a time when I am at a turning point in my own therapy as well as coping with a very unsatisfactory work situation. I truly do not have the mental resources to do your study justice."

6. Combinations of reasons provided on the form (N=27)

Multiple reasons were given by many participants and typically included respondents ticking several of the categories provided. The following responses were obtained:

6.1 Work-related/domestic pressures and length of the measures (N=15):

"I felt I had too many other things which took a higher priority. If it had been shorter I would have been more likely to complete it."

"It's too long when I have such little time available."

6.2 Lack of interest and work-related pressures (N=8):

"Lack of interest and too many such requests coming in via the register. Sorry."

A more detailed summary of participants statements about reasons for non-participation is available from the author, on request.

Appendix 15. Demographic Information Sheet

**The Role of Theory and Research in Clinical Practice: An Investigation of
Practitioners' Perceptions of the Scientist-Practitioner Model according to Stage
of Professional Development and Professional Allegiance**

Conducted by: Sarah Corrie

**Please note: all data will be treated in the strictest confidence and the any information you
provide will be shredded once the analysis is completed**

SOME INFORMATION ABOUT YOU...

1. What is your current professional title? (please tick the appropriate response)

- a) clinical psychologist ☐
- b) counselling psychologist ☐
- c) counsellor ☐
- d) trainee counsellor ☐
- e) trainee counselling psychologist ☐
- f) trainee clinical psychologist ☐

2a. If you are qualified, when did you complete your training?

2b. If you are qualified, what is your current grade?

2c. If you are currently a trainee, what year of your training are you currently in and when do you hope to qualify?

3. In which specialty/specialties are you currently working?

4. Which client group(s) do you currently work with, within this specialty? (e.g. clients seen within particular settings such as teams or in-/out-patients; clients with particular presenting problems, etc.)

5. How long have you been working in this specialty?

6a. If you are qualified, have you worked in any other specialties at post-qualification level? (If yes, please give details)

6b. If you are currently in training, are there any specialties or client groups of which you have particular experience (i.e. longer than one year)? If so, please give details

7. Have you completed any additional therapeutic training, either before or since the one specified in Question 1 (if so, please give details):

8. What is your preferred therapeutic orientation? (if more than one, please describe the main models you use in your current work)

9. What are your main professional activities? (if more than one activity applies, please tick accordingly and give an estimate of how much time you spend engaged in each)

- a) therapeutic work ☐
- b) research ☐
- c) supervision ☐
- d) management/consultancy ☐
- e) other (please specify) ☐

10a. Is any part of your therapeutic work conducted in the NHS? YES NO

10b. If yes, please give an approximate percentage of the time you spend working in NHS settings:

10c. If no, or if you work in settings additional to the NHS, please describe what these are with approximate percentage times for each setting:

11. Are you: male: ☐ female: ☐

12. What is your age:

ATTITUDES TO THEORY AND RESEARCH INVENTORY

Listed below are a series of statements which relate to beliefs about the use of theory, research, formulation and the scientist-practitioner model in therapeutic practice. For each statement please circle a number from 1-4 to indicate how closely the question corresponds to your own views, using the scoring key below as a guide:

- 1 = strongly disagree
 2 = disagree
 3 = agree
 4 = strongly agree

Please note: as I am distributing this measure to therapists from different professional backgrounds, I have used the generic terms 'therapy', 'therapist', 'practitioner' and 'client' to refer to the range of people and activities that psychological interventions often involve. When answering the questions, please use these terms as they relate to your own professional identity and therapeutic practice.

Section 1. Attitudes and beliefs about the role of theory in therapeutic practice

The role of theory in therapeutic practice has long been debated. Whilst there is a growing academic debate on this issue, we are interested in *practitioners'* views on the relationship between theory and practice. As a practitioner of psychological therapies, please could you share with us your personal beliefs by answering the following:

		strongly disagree	disagree	agree	strongly agree
1.	Theory plays an important role in my therapeutic practice	1	2	3	4
2.	Theory informs my therapeutic decision-making	1	2	3	4
3.	How I work with clients is not influenced by theoretical considerations	1	2	3	4
4.	Theory provides a basis for testing out the validity of my therapeutic intuition	1	2	3	4
5.	I particularly use theory when I get 'stuck' with a client.	1	2	3	4
6.	I use theory in the same way with all clients, regardless of the complexity of their difficulties	1	2	3	4
7.	I often find that my 'gut instincts' have an underlying theoretical basis	1	2	3	4
8.	I rely more on my therapeutic experience than I do on theory	1	2	3	4
9.	I can achieve positive therapeutic change without using theory at all	1	2	3	4
10.	My efficacy as a practitioner is enhanced if I can make sense of a client's problems in theoretical terms	1	2	3	4
11.	Theory helps me make sense of challenging therapeutic situations	1	2	3	4
12.	I am more comfortable with areas of uncertainty in my therapeutic work, than I used to be	1	2	3	4
13.	A therapist can never pay too much attention to theory in their work	1	2	3	4

NB: for the purposes of this study, theory is defined as *a complex set of interrelated statements which attempt to explain certain observed phenomena*. This definition includes the recognition that theories evolve over time and may be deemed applicable to different client groups at different stages (for example, object relations theories growing out of traditional psychoanalytic theory and cognitive theory giving rise to schema-focused work and its more recent application to people experiencing psychotic phenomena).

The term 'model' which also appears in the measures may include a number of theories which could potentially be independent of therapeutic orientation: for example, use of specific 'models' from developmental theory or sociological studies without a single underlying theoretical basis.

		strongly disagree	disagree	agree	strongly agree
14.	The value of theory in therapeutic practice is generally over-rated	1	2	3	4
15.	Theoretical understanding always underpins good practice	1	2	3	4
16.	Practice that is not informed by theory is unethical	1	2	3	4
17.	The relationship between theory and practice is best regarded as a reciprocal one	1	2	3	4
18.	Practice should be theory-driven as much as possible	1	2	3	4
19.	It is important to me that I develop my theoretical knowledge over the course of my career	1	2	3	4
20.	What is achieved in therapy cannot be understood solely in theoretical terms	1	2	3	4
21.	Experience can be a substitute for theoretical knowledge	1	2	3	4
22.	It is appropriate for theory to be adjusted through knowledge gained in practice	1	2	3	4
23.	I only use theoretical ideas which fit with my own personal philosophy of practice	1	2	3	4
24.	I believe that how my profession uses theory is different from how practitioners in other professions use theory (if you agree, please state in what ways)	1	2	3	4
25.	I communicate with colleagues about theoretical issues	1	2	3	4
26.	Sharing my theoretical understanding of a client's difficulties with them helps deepen our rapport	1	2	3	4
27.	Sharing my theoretical insights with a client does not deepen their self-understanding	1	2	3	4
28.	Communicating with colleagues around theoretical issues allows me to demonstrate my professional competence	1	2	3	4
29.	Colleagues from other professional backgrounds look to me as a source of theoretical knowledge	1	2	3	4
30.	I discuss clinical problems with colleagues in theoretical terms	1	2	3	4
31.	The culture of the organisation in which I work influences my use of theory	1	2	3	4
32.	I would like more time at work to reflect on theoretical issues	1	2	3	4
33.	My use of theory is not affected by work-related pressures	1	2	3	4
34.	I read less theoretical material when I am under pressure at work	1	2	3	4
35.	The setting in which I see clients affects my use of theory	1	2	3	4
36.	I have opportunities at work to develop my theoretical knowledge	1	2	3	4

		strongly disagree	disagree	agree	strongly agree
37.	On-going development of my theoretical knowledge is important to the organisation in which I work	1	2	3	4
38.	The way I use theory is influenced by the specialty in which I work	1	2	3	4
39.	I use theory more when I have less experience with a client's presenting problems	1	2	3	4
40.	I use theory more when I am working with clients with particularly complex needs	1	2	3	4

Please rate how each of the following has influenced your attitudes towards the role of theory in practice, where 1 = least influential and 10 = most influential:

1.	literature you have read	.....	(1-10)
2.	knowledge acquired through your own academic work (e.g. publications)	.....	(1-10)
3.	placement or clinical supervisor(s)	.....	(1-10)
4.	academic tutor(s)	.....	(1-10)
5.	experiences of personal therapy	.....	(1-10)
6.	sharing ideas with colleagues from the same profession	.....	(1-10)
7.	experience you have acquired through your own practice	.....	(1-10)
8.	the culture of the organisation(s) in which you work	.....	(1-10)
9.	working with colleagues from different professional backgrounds (specify whom) .....	.....	(1-10)
		
10.	other (please specify).....	.....	(1-10)
		

Case example:

Could you briefly describe a time when you used theory in a therapeutic situation and give an overview of your reasons for using theory in this particular instance:

.....

.....

.....

.....

.....

Overall, how important do you feel theory is in your therapeutic practice (please circle the appropriate response):

- not at all
- quite important
- very important
- essential

Section 2. Attitudes and beliefs about the role of research and evidence-based practice

As with theory, the most appropriate role for research in therapeutic practice has been of considerable academic interest. More recently, this debate has been fuelled further by discussions about evidence-based practice, whereby practitioners are being encouraged to use research evidence to inform their practice-related activities. We are interested in practitioners' views on the relationship between research, evidence and practice. As a practitioner of psychological therapies, please could you share with us your personal beliefs by answering the following:

		strongly disagree	disagree	agree	strongly agree
1.	Research findings play an important role in my therapeutic work	1	2	3	4
2.	I use research findings to guide my therapeutic decision-making	1	2	3	4
3.	Research findings have never had any impact on my practice	1	2	3	4
4.	Research findings do not provide a rationale for what I do in practice	1	2	3	4
5.	Research findings help me validate the more intuitive aspects of my practice	1	2	3	4
6.	Having access to research findings is important for my practice	1	2	3	4
7.	If I was faced with an unfamiliar presenting problem, I would automatically look up research that had been done in that area	1	2	3	4
8.	The psychological research evidence influences my decisions about what approach I might use with a client initially	1	2	3	4
9.	I always make use of research evidence in the same way, regardless of the complexity of a client's presenting problem	1	2	3	4
10.	Psychological evidence does not feel relevant to my therapeutic work	1	2	3	4
11.	I feel confident about interpreting research findings	1	2	3	4
12.	I would make more use of research findings if I knew how to interpret them	1	2	3	4
13.	Practice is not enhanced by psychological research	1	2	3	4
14.	Practitioners have a responsibility to keep themselves informed about research developments in their field	1	2	3	4
15.	I do not believe that awareness of research findings is necessary for a good therapeutic outcome	1	2	3	4
16.	Research refines our understanding of practice-related issues	1	2	3	4
17.	If I had faith in a therapeutic technique, I would continue to use it, even if the research evidence suggested that another technique was more effective	1	2	3	4
18.	I see the conducting of research as part of my professional role	1	2	3	4
19.	Practice is always in advance of knowledge gained through therapeutic research	1	2	3	4
20.	I believe that striving for practice that is evidence-based is important	1	2	3	4
21.	The value of evidence-based health care is generally over-rated	1	2	3	4

		strongly disagree	disagree	agree	strongly agree
22.	Achieving practice that is evidence-based should be a priority for our profession	1	2	3	4
23.	The emphasis on evidence-based practice could prevent therapeutic innovation	1	2	3	4
24.	Psychotherapeutic research has traditionally had insufficient impact on therapeutic practice	1	2	3	4
25.	I communicate with colleagues about issues relating to psychological research evidence	1	2	3	4
26.	I find it useful to discuss a client's problems with colleagues in the light of evidence conducted in that area	1	2	3	4
27.	Sharing my knowledge of relevant research evidence with a client can help me deepen my rapport with them	1	2	3	4
28.	Sharing research findings with my clients does not deepen their self-understanding	1	2	3	4
29.	Aiming for evidence-based practice does not affect how I communicate with colleagues	1	2	3	4
30.	Colleagues from other professions regard me as a source of expertise in research related matters	1	2	3	4
31.	The culture of the organisation in which I work influences my attitudes to research	1	2	3	4
32.	If I am under pressure, I read less research related material	1	2	3	4
33.	It is crucial for people to have a positive experience of research when training, if they are to feel confident about interpreting research evidence when qualified	1	2	3	4
34.	I regard the conducting of research as the responsibility of other professions (if you agree, please specify who):	1	2	3	4
35.	Having research skills is an important part of my professional identity	1	2	3	4
36.	Achieving evidence-based practice is a priority of the organisation in which I work	1	2	3	4
37.	I would like more time at work to reflect on how research findings could be relevant to my clients	1	2	3	4
38.	Working towards evidence-based practice is mainly a political exercise for securing funding for specific therapeutic models	1	2	3	4
39.	The organisation where I work is supportive of practitioners' needs to develop their knowledge of psychological evidence	1	2	3	4
40.	I would like more opportunities at work for being involved in research	1	2	3	4

Please rate how each of the following has influenced your attitudes towards research and psychological evidence in your practice, where 1 = least influential and 10 = most influential:

- | | | | |
|-----|---|-------|--------|
| 1. | research you have read | ..... | (1-10) |
| 2. | research you have conducted yourself | ..... | (1-10) |
| 3. | placement or clinical supervisor(s) | ..... | (1-10) |
| 4. | academic tutor(s) | ..... | (1-10) |
| 5. | experiences of personal therapy | ..... | (1-10) |
| 6. | sharing ideas with colleagues from the same profession | ..... | (1-10) |
| 7. | experience acquired through your own practice | ..... | (1-10) |
| 8. | the culture of the organisation(s) in which you work | ..... | (1-10) |
| 9. | working with colleagues from different professional backgrounds
(specify whom) | | (1-10) |
| | | | |
| 10. | other (please specify) ..... | ..... | (1-10) |
| | | | |

Have you ever undertaken yourself, or taken part in any form of research or evaluation: YES NO

If yes, please give details of ONE piece of research you did that felt particularly important to you (either for positive or negative reasons):

.....

.....

If no, please give details of a piece of research that you have read which impacted on you or your practice in some way (either positively or negatively):

.....

.....

Overall, how important do you feel research and psychological evidence are to your therapeutic practice (please circle the most appropriate response):

not at all

quite important

very important

essential

Section 3. Attitudes and beliefs about the scientist-practitioner model

In some professional trainings and practice, the concept of the scientist-practitioner model is emphasised. In other professional trainings and practice, it is not considered relevant to all. We are interested in different practitioners' views of the scientist-practitioner model. As a practitioner of psychological therapies, we are interested in your *personal* understanding of the term and whether it is a model which you feel guides your therapeutic work.

Are you familiar with the term 'scientist-practitioner model'?

YES NO

If yes, please read the following definitions and tick the one which concurs most closely with your understanding of what this term means. If no, please take an educated guess as to what you think this term might mean, based on contact with other professionals, discussion with colleagues or material you have read.

A. Therapists who draw upon or contribute to research in relation to their work. Research in this sense can refer to a range of activities including producing research (undertaking and publishing), reading research (consumption), applying research to practice (utilisation) and the motivation to apply research findings to one's practice: ☐

B. A model of working that implies a relationship between research and practice which relates principally to cognitive or behavioural approaches but which has less relevance to more exploratory therapeutic approaches which emphasise the therapeutic relationship rather than technical skill: ☐

C. A model which emphasises data collection and hypothesis testing to allow a therapist to examine whether there is evidence to support what they are doing in practice and which can then inform the therapist's thinking around therapeutic issues:

D. A practitioner who cannot only directly assist people with their problems, based on knowledge developed with his or her profession but who can also contribute to a collective knowledge that can improve our practice: ☐

E. A term which refers to someone who carries out both scientific research and therapeutic practice as part of their professional role. These activities can be quite separate from one another and there is not necessarily a mutual relationship between their research and practice-related activities: ☐

F. The model is associated with a particular model of science that emphasises prediction and control and the use of statistical testing and essentially excludes a direct consideration of the exploratory and intuitive aspects of professional work: ☐

G. A model which captures a spirit of enquiry whereby psychological evidence can be used in the service of understanding a client's difficulties whilst retaining a sense of the client as a unique individual: ☐

H. A model which emphasises the need to prove the efficacy of what you do in practice: ☐

I. A model which emphasises the necessity of being reflectively critical about one's work and the need for an integrated approach to knowledge which recognises the interdependence of theory, research and practice: ☐

J. Other (please specify; this may include a combination of any of the above):

.....

Please turn over and answer the following questions. If you feel that a particular item or items do not apply to your particular professional training and current work-related activities, please leave them blank.

		strongly disagree	disagree	agree	strongly agree
1.	The scientist-practitioner model feels important to what I do in practice	1	2	3	4
2.	The scientist-practitioner model feels alien to my work	1	2	3	4
3.	I define myself as a scientist-practitioner	1	2	3	4
4.	The scientist-practitioner model does not adequately capture the intuitive aspects of my therapeutic practice	1	2	3	4
5.	Different professionals use the scientist-practitioner model to mean different things	1	2	3	4
6.	I am not sure what the term scientist-practitioner model really means	1	2	3	4
7.	The scientist-practitioner model provides a framework for helping me deal with challenging therapeutic situations	1	2	3	4
8.	The scientist-practitioner model does not provide a framework which is useful for asking clinically-relevant questions	1	2	3	4
9.	I have my own idiosyncratic definition of the scientist-practitioner model	1	2	3	4
10.	The scientist-practitioner model impacts upon the way I make therapeutic decisions about clients I am working with	1	2	3	4
11.	How I work with clients is not affected by the scientist-practitioner model	1	2	3	4
12.	The scientist-practitioner model provides a framework which helps me test out the validity of my therapeutic intuition	1	2	3	4
13.	I believe that the scientist-practitioner model is most relevant to the work of other professions (specify whom)	1	2	3	4
				
14.	I believe that adhering to the scientist-practitioner model is important	1	2	3	4
15.	The scientist-practitioner model is a meaningless term	1	2	3	4
16.	The scientist-practitioner model embodies a spirit of enquiry that is important to retain	1	2	3	4
17.	The scientist-practitioner model does not feel congruent with my own values as a practitioner	1	2	3	4
18.	Adhering to the scientist-practitioner model is a way of maintaining standards in therapeutic practice	1	2	3	4
19.	The scientist-practitioner model needs to be expanded to include the more exploratory aspects of human experience	1	2	3	4
20.	There are other frameworks or models for therapeutic practice which are preferable to the scientist-practitioner model (please specify)	1	2	3	4
				
				

		strongly disagree	disagree	agree	strongly agree
		1	2	3	4
21.	Not enough emphasis is placed on learning how to be a scientist-practitioner during training	1	2	3	4
22.	It is legitimate for there to be more than one definition of the scientist-practitioner model, according to individuals' beliefs and values	1	2	3	4
23.	The value of the scientist-practitioner model is generally over-rated	1	2	3	4
24.	It is important for our profession to define itself in a way that retains an emphasis on scientific activity	1	2	3	4
25.	Colleagues from other professions identify me as being a scientist-practitioner	1	2	3	4
26.	The scientist-practitioner model influences the way I communicate with colleagues	1	2	3	4
27.	The scientist-practitioner model influences the way I communicate with clients	1	2	3	4
28.	It is useful for me to discuss therapeutic issues with colleagues, using the scientist-practitioner model	1	2	3	4
29.	Identifying myself as a scientist-practitioner allows me to demonstrate my expertise to other professionals	1	2	3	4
30.	I convey my professional identity to colleagues in terms of the scientist-practitioner model	1	2	3	4
31.	The organisation in which I work regards me as being a scientist-practitioner	1	2	3	4
32.	The scientist-practitioner model provides my profession with a unique professional identity	1	2	3	4
33.	It is important to the future of my profession to retain our identity as scientist-practitioners	1	2	3	4
34.	The organisation in which I work believes strongly in the scientist-practitioner model	1	2	3	4
35.	I rely on the scientist-practitioner model more when I am working in unfamiliar therapeutic situations	1	2	3	4
36.	The demands of the organisation in which I work influence how I make use of the scientist-practitioner model in my work	1	2	3	4
37.	My attitudes to the scientist-practitioner model are influenced by the client group(s) with which I work	1	2	3	4
38.	I was happy with how the scientist-practitioner was introduced to me when I was training	1	2	3	4
39.	The culture of the organisation in which I work affects my attitudes to the scientist-practitioner model	1	2	3	4
40.	I would like more opportunities at work for implementing the scientist-practitioner model in my practice	1	2	3	4

Please rate how **each** of the following has influenced your attitudes towards the scientist-practitioner model, where 1 = least influential and 10 = most influential:

- | | | | |
|-----|--|-------|--------|
| 1. | literature you have read on the subject | ..... | (1-10) |
| 2. | your own experience of working or attempting to work as a scientist-practitioner | ..... | (1-10) |
| 3. | placement or clinical supervisor(s) | ..... | (1-10) |
| 4. | academic tutor(s) | ..... | (1-10) |
| 5. | experiences of personal therapy | ..... | (1-10) |
| 6. | sharing ideas with colleagues from the same profession | ..... | (1-10) |
| 7. | experience you have acquired through your own practice | ..... | (1-10) |
| 8. | the culture of the organisation(s) in which you work | ..... | (1-10) |
| 9. | through working with colleagues from different professional backgrounds (specify whom) ..... | ..... | (1-10) |
| | | | |
| 10. | other (please specify)..... | ..... | (1-10) |
| | | | |

Overall, how important do you feel the scientist-practitioner model is in your therapeutic practice (please circle the most appropriate response):	not at all
	quite important
	very important
	essential

Section 4. Attitudes and beliefs about formulation

In some therapeutic trainings and practice, the concept of formulation is emphasised. In others, it is not a part of practice-related activities at all. We are interested learning about your *personal* understanding of and attitudes towards formulation and whether or not it is an activity which guides your therapeutic work.

Are you familiar with the term ‘formulation’	YES	NO
--	-----	----

If yes, please read the following definitions and tick the one which concurs most closely with your understanding of what this term means. If no, please take an educated guess as to what you think this term might mean, based on contact with other professionals, discussion with colleagues or material you have read.

A. Formulation refers to the therapist’s understanding of the chronological or developmental sequence of events which has led to the client developing the problem for which they are now seeking help. Understanding of this sequence can in turn inform a set of hypotheses about the ‘here and now’ factors which may be maintaining the client’s difficulties: ☐

B. Formulation is a process which can refer to a range of activities in the therapeutic context. At one extreme, it can be a simple question or statement about a key issue that allows you to reflect on and explore further with the client an area of potential significance. At the other end of the spectrum, formulation can represent a complex theoretical analysis of a client’s problems: ☐

D. Formulation refers to the challenge of arriving at a psychological conceptualisation of 'when, why and how'-type questions concerning the client's difficulties and what has brought them to see you at this point in time: ☐

F. Other (please specify; this could include a combination of any of the above):

Please answer the following questions. If you feel that a particular item or items do not apply to your particular professional training and current work-related activities, please leave them blank.

		strongly disagree	disagree	agree	strongly agree
1.	Formulation plays an important role in my therapeutic practice	1	2	3	4
2.	The way I formulate is informed mainly by my own preferred theoretical orientation	1	2	3	4
3.	I share my formulations with my clients	1	2	3	4
4.	The process of formulation allows me to integrate my theoretical and intuitive understanding of the client's situation	1	2	3	4
5.	My formulation influences which therapeutic model I use with a client	1	2	3	4
6.	I make formulations for every client I see	1	2	3	4
7.	I only make formulations for clients with particularly complex needs	1	2	3	4
8.	I use formulations more now than I used to	1	2	3	4
9.	I can achieve a positive therapeutic outcome without doing formulations	1	2	3	4
10.	My efficacy as a practitioner is enhanced if I make use of formulations	1	2	3	4
11.	Experience can be a substitute for doing formulations	1	2	3	4
12.	My formulations provide a basis for testing out the validity of my therapeutic intuition	1	2	3	4
13.	Practice that does not include a formulation is unethical	1	2	3	4
14.	Formulation is essential for good practice	1	2	3	4

		<div>strongly disagree</div> <div>disagree</div> <div>agree</div> <div>strongly agree</div>			
15.	The role of formulation in therapeutic work is generally over-rated	1	2	3	4
16.	Good formulations make use of theory	1	2	3	4
17.	Good formulations make use of research evidence	1	2	3	4
18.	Formulation should be seen as a tool for empowering clients	1	2	3	4
19.	I use formulations more when I get 'stuck' with a client	1	2	3	4
20.	I rely more on my therapeutic experience than I do on my formulations	1	2	3	4
21.	I use formulations in the same way with all clients, regardless of the complexity of a client's difficulties	1	2	3	4
22.	Formulations help me make sense of challenging therapeutic situations	1	2	3	4
23.	Doing formulations is an important self-discipline which one should always aim for in one's practice	1	2	3	4
24.	I believe that how my profession formulates around clients' difficulties is different from how practitioners in other professions formulate (if you agree, please state in what ways)	1	2	3	4
25.	I communicate with colleagues about the way I have formulated my clients' difficulties	1	2	3	4
26.	Sharing my formulations with clients helps deepen our rapport	1	2	3	4
27.	Sharing my formulations with clients does not deepen their self-understanding	1	2	3	4
28.	Communicating with colleagues from other professions about my therapeutic formulations allows me to demonstrate my professional competence	1	2	3	4
29.	Colleagues from other professional backgrounds look to me as a source of expertise in formulating clients' difficulties	1	2	3	4
30.	I discuss clinical problems with colleagues using formulations	1	2	3	4
31.	The culture of the organisation I which I work influences the way I do my formulations	1	2	3	4
32.	I would like more opportunities at work for developing my formulation skills	1	2	3	4
33.	The way I do my formulations is not affected by work-related pressures	1	2	3	4
34.	I do less in-depth formulations when I am under pressure at work	1	2	3	4
35.	The setting in which I see clients affects the way I do formulations	1	2	3	4
36.	I have opportunities at work to develop my skills in formulation	1	2	3	4

		strongly disagree	disagree	agree	strongly agree
		1	2	3	4
37.	On-going development of my formulation skills is not important to the organisation in which I work				
38.	The way I formulate is influenced by the specialty in which I work				
39.	I tend to do in-depth formulations more, when I have less experience with a client's presenting problems				
40.	I do formulations more when I am working with clients with particularly complex needs				

Please rate how each of the following has influenced your attitudes towards formulation, where 1 = least influential and 10 = most influential:

1.	material you have read about issues to do with formulation	.....	(1-10)
2.	your own experience of writing up formulations for the purposes of assessment in training, publications, general academic or clinical work	.....	(1-10)
3.	placement or clinical supervisor(s)	.....	(1-10)
4.	academic tutor(s)	.....	(1-10)
5.	experiences of personal therapy	.....	(1-10)
6.	sharing ideas with colleagues from the same profession	.....	(1-10)
7.	experience you have acquired through your own practice	.....	(1-10)
8.	the culture of the organisation(s) in which you work	.....	(1-10)
9.	through working with colleagues from different professional backgrounds (specify whom) .....	.....	(1-10)
		
10.	other (please specify).....	.....	(1-10)
		

Overall, how important do you feel formulation is in your therapeutic practice (please circle the most appropriate response):

- not at all
- quite important
- very important
- essential

Scientist Practitioner Inventory

The following questions ask about interest in activities performed by different mental health professionals. Please write in the brackets next to each question the number which corresponds most closely to your own interests. The response categories are as follows:

1 Very low interest	2 Low interest	3 Medium interest	4 High interest	5 Very high interest
---------------------------	----------------------	-------------------------	-----------------------	----------------------------

1. Writing an article commenting on research findings. ()
2. Conducting a psychotherapy session with an individual client. ()
3. Analyzing data from an experiment you have conducted. ()
4. Conducting a diagnostic interview with a client. ()
5. Presenting research findings at a conference. ()
6. Planning a behavior modification program for a client. ()
7. Formulating a theory of a psychological process. ()
8. Designing a new treatment method for a mental health agency. ()
9. Designing an experiment to study a psychological process. ()
10. Administering a psychological test to a client. ()
11. Writing a scientific book for psychologists. ()
12. Conducting couples and family therapy. ()
13. Supervising student's research projects. ()
14. Consulting with school personnel about a new prevention program. ()
15. Collecting data on a research project you designed. ()
16. Organizing a treatment program in a mental hospital. ()
17. Reviewing journal articles. ()
18. Presenting a report during a case conference. ()
19. Applying for research grants. ()
20. Supervising practicum students in clinical and counseling psychology. ()
21. Writing research papers for publication. ()
22. Reading about new approaches to psychotherapy. ()
23. Reviewing the literature on an issue in psychology.
24. Giving advice about psychological problems on a radio talk show. ()
25. Working for a funded research institute. ()
26. Interpreting a test battery for a client. ()
27. Serving as an editor for a scientific journal. ()
28. Helping a client get in touch with feelings. ()

1 Very low interest	2 Low interest	3 Medium interest	4 High interest	5 Very high interest
29.	Learning new strategies for dealing with psychological problems. ()			
30.	Writing a statistical program. ()			
31.	Reading a book on innovative research designs. ()			
32.	Going through therapy to make yourself a better person. ()			
33.	Learning about a new statistical procedure. ()			
34.	Attending a conference on psychotherapeutic techniques. ()			
35.	Brainstorming about possible research with colleagues. ()			
36.	Consulting with other psychologists about a particular client's concerns. ()			
37.	Helping a colleague understand confusing statistical findings. ()			
38.	Reviewing an agency's intake form for a new client. ()			
39.	Developing new explanations of well accepted empirical studies. ()			
40.	Reading a book written by a famous psychotherapist. ()			
41.	Conducting group psychotherapy sessions. ()			
42.	Serving on a thesis or dissertation committee. ()			

YOUR COMMENTS...

Finally, are there any other issues which this questionnaire has not covered which you think are important? (If so, please specify)

Section 1: Attitudes and beliefs about the role of theory in therapeutic practice:

Section 2: Attitudes and beliefs about the role of research and evidence-based practice:

Section 3: Attitudes and beliefs about the scientist-practitioner model:

Section 4: Attitudes and beliefs about formulation:

Overall:

Do you have any comments you would like to make about this questionnaire? (If so, please specify)

Section 1: Attitudes and beliefs about the role of theory in therapeutic practice:

Section 2: Attitudes and beliefs about the role of research and evidence-based practice:

Section 3: Attitudes and beliefs about the scientist-practitioner model:

Section 4: Attitudes and beliefs about formulation:

Overall:

Many thanks for taking the time to complete this questionnaire and for your valuable comments.

Appendix 19. Piloting of the measures

The measures used in stage 2 of the study were first piloted on a sample of four clinical psychology trainee colleagues to obtain initial feedback on their content and presentation. Feedback was obtained verbally, through use of brief, informal interviews.

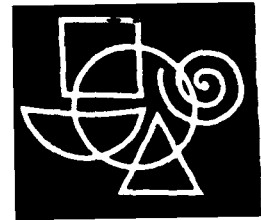
Overall, the content of the measures was reported to feel appropriate and meaningful to the nature of the study. There were no specific comments made about either the demographic information sheet or the *Scientist-Practitioner Inventory*. The content and structure of the *Attitudes to Theory and Research Inventory* also felt appropriate. However, one point of potential confusion was noted. After the 40 items relevant to each of the four subscales, participants were requested to rate from 1-10 the impact of a number of experiences upon their attitudes towards the area in question.

Two of the four pilot participants had interpreted this to mean that the variables listed should be ranked in order of priority, rather than rating each individual experience from 1-10. To avoid any subsequent confusion, and following discussion with the pilot participants, the wording was therefore altered from "*please rate how the following have influenced your attitudes towards...*" to "*please rate how each of the following has influenced your attitudes towards...*". This was deemed to give a clearer indication as to what was required.

Participants notes that completion of the measures was reasonably time consuming. However, they also reported that given the potential complexity of the topics being investigated, the length was appropriate. Following discussions with the pilot participants the author decided, therefore, not to produce a shortened version.

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Kent TN3 0TG

Telephone: 01892 515152
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**SALOMONS
CENTRE**

13 March 1997

Dear

Salomons Centre Ethics Committee have kindly given me permission to contact you, as one of the Recognised Courses of the British Association of Counselling. I am a clinical psychology trainee and as part of my final year of study, I am conducting a research project investigating practitioners' perceptions of the role of theory and research in their practice. I am particularly interested in the relationship between theory, therapeutic research and practice and the academic literature that has rejected the scientist-practitioner model as an inappropriate conceptual framework for therapeutic practice.

My interests in this area have been fuelled by the recent debate in the academic literature about practitioners' apparent lack of use of theory and research in their work. This, I believe, illustrates the need for a more adequate understanding of therapeutic practice. A first step towards this aim would be to describe how theory and research are perceived by a range of professions which will allow me to identify similarities and differences and explore how the professions can complement one another more appropriately.

I believe that in order to get a representative overview of different professional attitudes and beliefs, it is crucial for me to include the views of counsellors, as an extremely important group of professionals who offer psychological therapies. I am therefore hoping to obtain the views of trainee and qualified practitioners in the fields of counselling, counselling psychology and clinical psychology. This will enable me to identify how practitioners' attitudes change over time and will, I hope, offer some insight into professional development across diverse professional trainings.

In view of my wish to include counsellors' views in my research, I am writing to you as a member of staff on the training scheme to request your permission to distribute to your counselling trainees three measures I am using to investigate this area. These measures comprise (1) a demographic information sheet; (2) a survey instrument and (3) a standardised questionnaire for measuring research and practitioner interests. The survey instrument is based on themes which I have extrapolated from in-depth qualitative interviews conducted at a previous stage of the research. This stage of the research included interviews with qualified counsellors, as well as representatives from the professions of counselling psychology and clinical psychology.

Should you allow me to approach your trainees, I would like to emphasise that all data will be treated in the strictest confidence and will be shredded once my analysis is completed. Participation of individual trainees, even with your permission to proceed, is entirely voluntary. These points are clearly stated on the information pack which I will be sending out to each participant. In return for their support, each participant will also be given the opportunity to request a report on the findings which will be sent to them on completion of the study.

I do hope that you will feel able to support me in my request. If you would like any additional information, please contact me at the above address or telephone number and I will be happy to answer any questions you may have. If I do not hear from you within THREE WEEKS, I shall assume that you are happy for me to circulate my measures to the trainees on the training scheme.

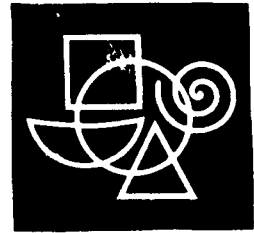
In the meantime, thank you for taking the time to read this information sheet.

Yours sincerely

SARAH CORRIE
Psychologist in Clinical Training

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SALOMONS
CENTRE

Please read this letter carefully before
continuing to read the enclosed measures

March 1997

Dear Colleague

Salomons Centre Ethics Committee has kindly given me permission to contact you, to ask you to participate in the research that I am conducting as part of my final year training in clinical psychology. I have identified you as a potential participant through the BPS' Register of Chartered Psychologists. In return for your support, you will receive a report on the findings which will be sent to you on completion of the study.

The aims of my study are to explore practitioners' perceptions of the role of theory and research in their therapeutic work and their attitudes towards the scientist-practitioner model. I am also interested in the difficulties to which theory- and research-practice links give rise and the literature that has rejected the scientist-practitioner model as an inappropriate conceptual framework for therapeutic practice. I believe that the debate in the literature illustrates the need for a more adequate understanding of therapeutic practice. A first step towards this aim would be to describe how theory and research are perceived by a range of professions which will allow me to identify similarities and differences and explore how the professions can complement one another more appropriately.

In order to address these issues I am hoping to obtain the views of trainee and qualified practitioners in the fields of clinical psychology, counselling psychology and counselling. This will enable me to identify how practitioners' attitudes change over time and will, I hope, offer some insight into professional development across diverse professional trainings. Whilst I do appreciate how precious your time is, I nonetheless hope that you may be interested in participating so that your views can be included and I can argue that the findings are truly representative of practitioners' views and experiences.

I have devised a 'pack' of three measures which, if you would like to participate, I would be grateful if you could complete and return to me in the pre-paid envelope. These comprise a demographic information sheet, a detailed survey instrument based on themes extrapolated from in-depth interviews which I conducted during an earlier stage of the study and a standardised questionnaire for measuring research and practitioner interests. Finally, I have enclosed a slip which you should complete and return if you would like a copy of the results. Based on a pilot of the measures, I estimate that they should not take longer than 45-50 minutes to complete. If you would like any additional information, please feel free to contact me at the above address or telephone number and I will be only too happy to answer any questions you may have.

Your participation is entirely voluntary, all responses will be treated in the strictest confidence and all data will be shredded once my analysis is completed. If however, you would prefer not to participate, I would be very grateful if you could take a moment just to complete the last sheet which gives me some indication as to how you reached this decision. Your brief reply would enable me to understand the decisions underlying response rates more clearly and allow me to think about issues of design in my research.

Thank you for taking the time to read this letter and I hope to hear from you soon.

Yours sincerely

SARAH CORRIE
Psychologist in Clinical Training

REQUEST FORM FOR A COPY OF THE OUTCOME OF THE STUDY**Title of Research Study:**

The Role of Theory and Research in Clinical Practice: An Investigation of Practitioners' Perceptions of the Scientist-Practitioner Model according to Stage of Professional Development and Professional Allegiance.

Investigator: Ms Sarah Corrie

Address: Department of Psychology
David Salomons Estate
Broomhill Road
Southborough
Tunbridge Wells
Kent TN3 0TG

(please cut here and return to the above address)

Please send me a copy of the results of your study when you have completed your research, which I understand I will receive no later than November 1997.

Name:

Contact Address:
.....
.....

Appendix 23. Preliminary Analyses on the ATRI (Non-Significant Differences on Gender)

Table 18. Mean Scores for each of the Subscales of the ATRI and Results of t-test Comparisons between Male and Female Participants

Subscale	Males: sample size, mean (sd)	Females: sample size mean (sd)	t-value	df	2-tailed sig.
Theory	N=34 116.71 (9.90)	N=86 117.08 (7.88)	-.22	118	.83
Research	N=32 114.91 (12.82)	N=88 113.45 (12.68)	.55	118	.58
Scientist- Practitioner	N=23 111.04 (14.44)	N=51 109.14 (17.61)	.45	72	.65
Formulation	N=28 111.71 (9.53)	N=73 113.05 (8.6)	-.68	99	.50

All figures have been rounded up to 2 decimal places

Appendix 24. Preliminary Analyses on the ATRI (Non-Significant Differences between Trainee and Qualified Therapists)

Table 19. Differences between Trainee and Qualified Therapists on the Theory Subscale

Theory Subscale					
Professional Group	Status (Total N=120)	mean (sd)	t-value	df	2-tailed sig.
Clinical Psychologists	trainee (N=46)	117.85 (7.92)	-.46	68	.65
	qualified (N=24)	116.92 (8.39)	-	-	-
Counselling Psychologists	trainee (N=10)	119.50 (4.27)	-1.68	19.8	.11
	qualified (N=16)	113.69 (12.77)	-	-	-
Counsellors	trainee (N= 3)	116.67 (7.37)	-.04	22	.97
	qualified (N=21)	116.48 (7.32)	-	-	-

All figures have been rounded up to 2 decimal places

Table 20. Differences between Trainee and Qualified Therapists on the Research Subscale

Research Subscale					
Professional Group	Status (Total N=120)	mean (sd)	t-value	df	2-tailed sig.
Clinical Psychologists	trainee (N=48)	117.04 (10.74)	-.68	75	.50
	qualified (N=29)	115.31 (11.16)	-	-	-
Counselling Psychologists	trainee (N=10)	113.40 (6.06)	-.40	14.6	.72
	qualified (N=12)	111.42 (15.97)	-	-	-
Counsellors	trainee (N= 4)	111.75 (15.84)	-.77	19	.45
	qualified (N=17)	104.76 (16.38)	-	-	-

All figures have been rounded up to 2 decimal places

Table 21. Differences between Trainee and Qualified Therapists on the Scientist-Practitioner Model Subscale

Scientist-Practitioner Model Subscale					
Professional Group	Status (Total N=74)	mean (sd)	t-value	df	2-tailed sig.
Clinical Psychologists	trainee (N=34)	113.94 (14.26)	.05	46	.96
	qualified (N=14)	114.14 (8.33)	-	-	-
Counselling Psychologists	trainee (N= 7)	112.85 (8.44)	-1.35	7.24	.22
	qualified (N= 7)	98.85 (26.12)	-	-	-
Counsellors *	trainee (N= 1)	-	-	-	-
	qualified (N=11)	97.09 (20.86)	-	-	-

All figures have been rounded up to 2 decimal places

* t-test not conducted on this group as the sample size for trainee counsellors was N=1

ADDENDUM

Research Diary

Journal entries during the preparatory phase of the study: the lead up to submitting proposals for Examiners and Ethics Committees

17 April 1996:

We had a group meeting with Margie in her capacity as Clinical Research Director concerning research supervision and how to use it, maximise opportunities, etc. Whilst I am clear about my supervisor and the broad area I am investigating, it was helpful to think through issues to do with supervision, planning and organising the study.

I am aware of mixed feelings at this stage: excitement at doing something that feels very much my own and also anxiety about my competence to undertake a piece of research of this scale. Can I really trust my ideas? Am I sufficiently competent to do the work at all? I have big anxieties about my competence in this area. My undergraduate dissertation is all I really have to go by and somehow that doesn't feel too helpful concerning the research I am about to undertake. Although I am unsure of my skills, I am also aware that I want these early days to be a creative time, a time when I can play around with ideas and a time when I can think about where my interests lie.

20 April 1996:

One of the things I am currently grappling with is the question of methodology. What I want is a method that can adequately capture the depth of the issues involved, which would seem to suggest that a qualitative method might be most suitable. However, from some of the qualitative research I have read in this area, it seems to me that the results are often inappropriately generalised to the profession as a whole on the basis of tiny samples (for example, Potter's N=1 study on social skills!). So I need a method that will allow some broader conclusions to be drawn, which then makes me think about a quantitative method.

The more I think about it, the more I suspect that if I am to do the subject area the justice I think it deserves, a mixed method might be most appropriate. However, to do both research paradigms justice will require a great deal of work and I am uncertain whether I have either the skills or the necessary time-frame to do so. Also, whilst combining methods is advocated in much of the literature, there aren't many examples of them being used conjointly (i.e. with equal emphasis).

3 May 1996:

I had my first 'official' dissertation tutorial. This felt good, as though we were setting the foundations for what is to follow. I left feeling very positive about what I am hoping to investigate and how I want to investigate it. I'm also hoping that it's an area where I can bring my interest in philosophy of science to the fore.

12 May 1996:

I've had a couple of days to digest my tutorial with Margie. I can't believe we were talking about my research proposal already!

What I want to be particularly aware of, is the reflexivity of what I'm trying to investigate. Even at these early stages, I am aware how much of an impact the study has had on my experiences of the teaching. I listen to what my colleagues say with a new type of curiosity: how they make sense of their work, how they chart their progress and how they report changes in self-confidence. I also think it's made me want to use the teaching in a different way. I find that I am wanting to question our speakers about things that previously I would have just accepted or taken at face value.

My research has also made me think about my experience of training and what the course staff's ambitions are for me: as a practitioner, researcher or more generally as someone who will hopefully soon be joining the profession as a qualified member. At the moment, all this feels very exciting. However, I want to stay very close to the fact that the process may also feel uncomfortable at times. If, for example, my participants indicate that theory, research and the scientist-practitioner model are not helpful, how will that leave me feeling about my own clinical work...the training scheme...the last three years of my life...? There is a reflexivity in investigating this area which I need to hang on to.

I have come across a chapter in the Richardson book on the use of self in qualitative research which feels quite relevant to this issue of reflexivity. It looks as though it could be quite helpful...

30 May 1996:

I met with Margie to discuss and review my early draft of a research proposal. She seemed to indicate that it's coming along, but I feel there are still a lot of areas I need to address.

It was helpful to spend time discussing the qualitative bit of the method and to have her confirm that there

really is no single correct method for qualitative analysis. It's up to me to make the choice and to trust my own ability to make that choice. Having faith in my own choices and ideas is the bit that feels hardest for me still. Although it's getting better with time, there is still a part of me that yearns for the illusory 'right answers' in choosing the most appropriate method. Deep down, I know that the only right answer is that there is no right answer!

7 June 1996:

I had another tutorial today in which we continued to discuss my research proposal. The regularity of our meetings has felt very containing, not only in terms of helping me develop my ideas but also in terms of allowing us to develop a good working relationship and gently pushing things along. Probably the major thing today was realising that my research proposal is just about there. I'm hoping to get it in next week for the External Examiner to consider. I'm actually feeling quite surprised about how easily things seem to have come together on the proposal, although there is still a lot to do!

31 July 1996:

It's been sometime since I last wrote, what with annual leave. Since then, my research proposal has been approved; I received some positive and helpful feedback and have now made the revisions necessary for the September Board.

I am now aware of all the work I have to do for the Ethics Committee. My provisional plan is to try to be ready to start the interviews at the beginning of October, which will allow me to 'pace' myself throughout the process. However, this also means I have got a *huge* amount of work to do between now and then. I'm not sure how I'm going to balance it all.

Journal entries made during stage 1 of the research

4 October 1996:

The teaching this week on qualitative research methods has felt very useful - at a philosophical and practical level. I was particularly struck by the two previous trainees here who came to talk to us about their experiences of using qualitative research methods. They seemed so confident and competent. Will I ever be like that?

One thing that has become very clear from this week's teaching is that there is no right or wrong answer in the quantitative/qualitative debate and where people position themselves on the continuum seems often to be a function of personal values, rather than anything else. This feels freeing and anxiety-provoking at the same time in that it allows me to make a choice based on my priorities but also means I have to trust my own opinions. I am also aware of the amount of 'internal processing' I have had to do to feel OK about using a mixed method. Whilst it makes sense on a practical level (i.e. utilising methods and techniques in an eclectic way, in response to the nature of the enquiry), I am aware that at a philosophical level, I am mixing my traditions which protagonists of each philosophical school might question.

One other thought... I have been struck throughout this teaching that social constructionism seems to have been proposed as the only viable alternative to positivism. But what about critical realism which emphasises the need for creating closure in the form of experimental designs, whilst moving away from prediction and control - the apparent flaws inherent in positivism? No-one seems to have mentioned this so far. I wonder though, if it's something to do with what one of the lecturers was saying about phenomenology, meaning and experience being an important part of the causal picture but not the only part. Critical realists would acknowledge the crucial role of discourse, but would also argue for the need to study causal processes. I need to revisit some of this literature to help me think these things through in relation to my own choice of method.

14 October 1996:

I have begun writing to people regarding stage 1 interviews. This made me feel anxious about how to 'communicate' my ideas sufficiently well to attract my potential participants. What happens if no-one wants to be interviewed? Conversely, I'm also anxious about the prospect of actually interviewing anyone! The people I have approached are all individuals who are knowledgeable in their fields. This feels daunting. Qualitative methods emphasise mutuality and joint ownership of the research process but what can I really give to them, given the imbalance of our relative experiences? Is this really going to be something from which my participants can get some benefit or am I merely relying on them to do me a favour? As the conducting of the research itself looms closer, I am feeling less certain of what I can offer...

18 October 1996:

I posted my letters to potential stage 1 participants today. This was a great relief; I now have some breathing space before I make my follow-up 'phone calls. I'm still feeling a bit daunted by the prospect of interviewing these people but I was quite pleased with my letter. As I was writing to each person, I also became aware that I had a clear reason for contacting them in particular, which often seemed associated with a sense of myself having been influenced in my own thinking by them, in some direct or indirect way.

There's still something that feels slightly strange about interviewing people so much more experienced than myself about what 'doing' therapy means. As Margie said, on one level, it's a bit like the police investigating the police!!

One bit of really good news, though: the person I approached about piloting the interview schedule has agreed to be involved. Furthermore, she thought the research sounded really interesting, which was encouraging. Let's hope my actual participants feel the same way!

24 October 1996:

Good news! I've had a response from one of the people I wrote to, who said she would be very interested in participating and would be "*delighted to help in any way she could*". I was extremely pleased. It felt really good to have confirmation from someone completely external to my research that it is worthwhile taking part in. We've arranged a time to meet.

26 October 1996:

Following my letter, I contacted another of the potential participants to whom I had written who is also very interested in being involved. In fact, he said was pleased to have been asked and I sensed that he was also quite flattered. I'm quite surprised at the enthusiasm that both people so far have conveyed to me about what I am doing.

31 October 1996:

I carried out the pilot interview today. This was very helpful, despite technical problems with the tape recorder which I will iron out by the time the real interviews begin. I initially felt quite self-conscious and aware of the differences in our roles and experiences. I also found myself wondering about how I was coming across as an interviewer and whether I seemed

vaguely competent or incompetent. I need to find a way to let these concerns go: during the interview at least, as I think they could end up stifling me.

My pilot participant gave me a lot to think about, more at a personal level, really, as the interview itself felt fine. I felt moved by her openness and willingness to share with me thoughts, feelings and experiences on her own professional development and personal values. I don't think I had fully anticipated how strong the feelings evoked in me would be.

I have received letters from two more participants. Both want to participate!

18 November 1996:

By the end of this week, I had completed two interviews. On the practical side of things, I need to find a way to contain them more. One was two-and-a-half hours which, although the participant felt comfortable with this, has meant that transcribing is very laborious and time-consuming (around 11 hours!!!). I will discuss this with Margie at the next tutorial. The practical issues aside, however, WHAT an opportunity! I am feeling so moved by both people's generosity, openness and enthusiasm to share with me their experiences and knowledge. The problems I had feared (apprehension or discomfort about speaking to a trainee about these issues) were just not an issue at all. I also found myself relaxing and just getting absorbed in what people were saying so that in fact, the process did feel like a joint one. Now I know what qualitative researchers are talking about when they say that the researcher is 'affected by' just as much as she 'affects'!

6 December 1996:

The end of this week has seen me complete another two interviews. It feels exciting and stimulating although I am feeling quite overwhelmed by the amount of work that the data analysis is involving.

The first one involved a five hour journey. Interestingly, this person conveyed a change in theoretical orientation as a result of disillusionment with the model in which they had originally trained. This in itself was fascinating, as we began to trace the development of their career in terms of changes in philosophical beliefs and subsequent therapeutic approach.

The second interview this week involved quite a long initial discussion about my introductory letter. I think this participant felt that I had not been sufficiently direct in my letter about stating my own values and

attitudes towards the scientist-practitioner model (i.e. did I endorse or condemn it). Actually, there's a reason for this: I don't actually think the issues are that clear-cut at present. I still feel, in retrospect, that the letter I wrote at the time reflected my honest feelings about the subject and wasn't an attempt to make an uncomfortable issue into something more palatable. It reminded me, however, just how emotive this whole area can be.

The contact I am having with people continues to be stimulating and exciting and is offering me a depth of insight into what it means to be a practitioner, that I had not anticipated. Once again, I am learning about *myself* through the dialogue I am having with others. I am learning about who I want to be as a clinician and my values in relation to my professional practice are evolving, as a result of the contact I am having with people.

The flip side of this is can I do justice to the richness of the data in my analysis of them? I am very concerned about the practicalities of getting the data analysed and my relative inexperience in qualitative methods. So far, however, I have felt surprised by what I have found. It seems that people are making very active use of theory in their work, across a whole range of clinical situations which is in fact quite consistent with what we are 'supposed' to be doing. This is not what I had anticipated, given the literature which suggests that professionals may not use theory and certainly do not feel influenced by research! What does this inconsistency mean?

17 December 1996:

I had another really interesting interview. The participant was very supportive of my research and interested in my own training. I did not audiotape this interview; the participant had lost her voice due to a virus so I just listened and took notes. This had an interesting effect on me. I found myself feeling somehow freer: maybe it was something about trusting my listening skills, rather than resorting to hours of verbatim transcribing.

18 December 1996:

Unfortunately, the last of my interviewees cancelled her interview today due to work-related pressures. I confess I felt very disappointed, even though we have scheduled another date. In retrospect, I think I have probably been somewhat spoiled so far! Everyone else said yes immediately, so this stage of the research has moved on at a considerable pace. Having one person rearrange has brought me back down to earth, I guess.

Plan for Christmas Break:

- * rest
- * reflection
- * have a break from data analysis until I return to work

16 January 1997:

I carried out the last of my stage 1 interviews today. Whilst time was tight, as the participant had another appointment directly after me, we managed to complete the interview and it was again, extremely helpful. I was struck how aspects of her own beliefs, interests and perceptions coincided with my own. It is strange this feeling and one which has recurred with all my participants, one way or another. It has made me wonder whether another part of me has been operating throughout this research: an unconscious part of me that has been drawn to certain people for more complex reasons than I initially appreciated. I need to reflect on this a bit more. I also wonder if it has any implications for how I have selected people in terms of their 'representativeness'.

At the end of this, my last interview, I realised again how lucky I have been to receive the support of all eight participants. Why is this, I wonder? Is it something to do with the nature of my research, the people I have approached or the way I approached them? Clearly the research has had some considerably appeal for some people. Now what I need to do is keep the interest going for stage 2 participants!

The analysis of the qualitative material is progressing slowly but surely. I am also beginning to feel more confident in trusting my own instincts and reactions to the data as well as my ability to analyse them. It's fascinating to see the same themes emerge again and again. I'm not yet sure, however, how I can develop these data into a survey-type format without losing the richness of the interview data or making the survey instrument over-inclusive.

I'm also aware I must not lose track of the administrative things. I need to start sending out letters to Course Directors soon.

30 January 1997:

I seem to have hit the first major obstacle of the research and least of all where I had expected it to be. It's going to be very difficult for me to access a representative sample of stage 2 participants. I had hoped to get lists of counsellors and psychologists working in NHS departments and other settings. However, this was no easy task. I telephoned the BPS and spoke to

someone at the DCP who just laughed when I said what I was looking for and told me there is no record of who works where.

This is not too much of a disaster in terms of accessing psychologists as I can rely on the BPS Register. However, it makes things much more difficult for obtaining a sample of counsellors. I had a look at the BAC's *Counselling and Psychotherapy Resources Directory* but this wasn't particularly helpful. It seemed to include both individuals and organisations offering a very wide range of services but some of them were highly specialised and it wasn't clear whether any of them worked in the NHS.

I began to feel somewhat anxious. I can't believe there is no way of accessing this information. The person at the BPS suggested I speak to someone at an organisation which provides a database. I was told I could buy some labels for £150 which provided the names of UK clinical directorates providing any form of psychological therapy. However, this isn't what I am looking for. The DCP also suggested that I could try 'phoning round training schemes to try to access lists of psychology departments in their area. Whilst I did discuss my situation with one course secretary who was kind enough to send me a copy, it didn't include any information on counsellors and was an unofficial source of information. I'm not sure how I am going to get round this one.

31 January 1997:

I have reached a decision regarding the stage 2 predicament. I have lists of departments in the SE and SW and NE and NW Thames areas. The SE and SW list has names of counsellors working in psychology departments so if the worst comes to the worst, I can always approach individuals in these departments (with the relevant permission sought) and accommodate this into my research design. This is not ideal, but given the lack of clear information on where counsellors work, this may be the best I can do.

3 February 1997:

I am continuing with the qualitative data analysis. It's very time-consuming. I oscillate between feeling overwhelmed by the sheer quantity of the data and being completely immersed and fascinated by it. However, definite themes are beginning to emerge. What is interesting is that what the participants are doing in their work, the resources they bring to bear on their work and their attitudes towards theory and research are much more complex and intrinsically associated with their own values than the existing literature suggests. I'm

things one day at a time and see what happens. It's the best I can do.

25 March 1997:

I had a call from one of my stage 2 participants - a counselling psychologist. She has requested a separate copy of my measures for her own teaching purposes. She explained that although she has completed the form as a participant, she thought the themes were very important and would be useful as a springboard for helping her own students think about some of the relevant issues in relation to theory- and research-practice links. I was really flattered; it was reassuring to know that she had got something out of it. I think generally I am a bit concerned that the richness of the interview data and the work that has gone into devising the measure won't be immediately obvious to stage 2 participants. Her response was reassuring.

2 April 1997:

I had my first batch of replies today, which was a good feeling: people are responding. The range of responses has been varied. Some people have found it really interesting and thought-provoking. One person even thanked me for contacting them as filling in the questionnaires had helped them think about things in a new way. Other people have been more critical. One person also described it as 'boring', which I must confess left me feeling gutted.

I did, however, receive a very supportive letter from one of the counselling courses. The director seems really enthusiastic about my contacting their trainees, which was a good feeling.

8 April 1997:

I had a call from another of the counselling training schemes I have approached who, following their examination of my measures, have given me permission to proceed. They indicated that they were impressed with the amount of work that had gone in to the devising of the measure and the detailed information I had sent them about my study. Getting positive feedback right now, feels terribly important to me.

10 April 1997:

I had a really good telephone conversation with one of the directors of the counselling courses. Having had a chance to look at the measures I am using, he was contacting me not only to give me permission to go ahead

but also to give some (greatly appreciated) complimentary feedback on what I was doing and the measure I had devised. He said that the course received numerous requests for participants and that they often have to say no to people. However, he said the course staff were particularly impressed with my work. He explained that this was partly because it looked well-designed and carefully thought through and also because I had demonstrated a concern about the trainees themselves in terms of confidentiality, access to the results, appreciation of time constraints, etc.

The course director also said that a colleague of his actually wanted to do the questionnaires himself! My research is apparently a particular interest of his and he was wondering whether we could have some additional dialogue about these issues at a subsequent date. The response was *such* an uplift! However, it left me with some questions. Why have the responses been so varied? What, for some, is time-consuming and boring seems for others to be inspiring, well-thought out and important. I'm not sure I can get my head around these different perspectives just yet.

11 April 1997:

Now that most of the measures have been sent out, I have some space to begin writing up stage 2 of the research. It is proving a real challenge to explain clearly (without becoming turgid) the details of the work that I have done. I somehow need to find a way to provide sufficient detail so that the method could be replicated and that reflects the amount of work I have put into it, without it becoming overloaded.

In many ways, I am feeling my way in the dark. I have not come across any literature which attempts to combine quantitative and qualitative studies, without one or the other method being compromised and therefore I have no literature which could act as a conceptual guide. This makes the write-up a real challenge. The qualitative and quantitative stages seem to have involved very different skills and it is hard to communicate my experience of that and the challenges it has entailed in the context of the write-up. As it looks at the moment, I think I must have written the longest method section in the history of psychological research!

14 April 1997:

I have begun writing up the introduction. This has actually been quite a containing experience because it has reminded me of a lot of the early reading I did and why I became fascinated by this area in the first place. I think that with all the photocopying of questionnaires and addressing of envelopes, I had lost the origins of my

own ideas a bit. It has felt good to revisit them and appreciate once again that my research ideas and questions were grounded in quite a thorough review of what had been written before. Reviewing the literature at this stage has also reminded me that feelings to do with this area are often strong and that the literature is characterised by extreme and often angry views. This may help explain why some of the reactions have been so apparently extreme.

The writing up is a daunting process: something about condensing everything into a summarised form and realising that time is pressing on.

17 April 1997:

This was a good day on two counts. Firstly, I have set up a database for the quantitative analysis. This was not nearly as difficult as I had imagined. Once again, I realised I had been panicking inappropriately. There are enough completed questionnaires being returned for me for me to be able to carry out some meaningful statistical analyses which feels good.

Secondly, I had a tutorial with Margie who was very helpful in helping me think through the range of responses I have had. I have received more positive and negative extremes. A couple of my colleagues have spoken to me, saying how interesting they found it and asking what sort of results I was getting. I have, however, had another angry response from a trainee clinical psychologist who told me that the whole area I was investigating was a "...waste of time and why was I bothering with this, when there were so many important areas of psychological distress that needed to be addressed". I have received two letters from counsellors: one who gave me a very moving account of her own career history and the personal experiences and challenges that influenced her career and another letter in which the counsellor wanted me to draw attention to her belief that counsellors do not get adequate theoretical training.

I'm still struggling to make fuller sense of the reasons why my research should evoke such extreme reactions. What am I tapping into? Margie and I talked about this for some time. What is clear, is that some of the responses I am getting are mirroring the angry or vehemently positive accounts of these issues in the literature. Clearly this is an emotive area and my questionnaire has tapped into a lot of strong feelings.

On a more personal level, as things stand right now, things feel better. I am still uncertain about whether I shall be able to meet the July deadline. This will depend on whether I need to take more carer leave or whether my family situation deteriorates. In the

meantime, I'm taking one day at a time: I now have a draft of the method, the introduction is underway and my database is set up. I do, however, often feel stuck between the proverbial rock and the hard place: when I am with my family, I feel guilty for not working; when I am working, I feel guilty for not supporting them sufficiently. Finding ways to achieve a balance in my life is, I know, something I have to learn. I just wish it had been a learning exercise I could have postponed for another occasion!

21 April 1997:

As agreed from my previous conversation with course directors, I left messages for two directors of counselling courses. Despite repeated 'phone calls and messages neither of them has responded which feels frustrating. I will have to proceed without them, although this gives me a very small sample of three courses. I feel despondent about this. I really wanted to include trainee counsellors in the study, but now I suspect they'll be really under-represented in the response rates.

Journal entries made during the final stages of the study: analysis of the quantitative results and the process of writing up

2 May 1997:

I felt very pleased with what I achieved today: I now have a final draft of both the introduction and method. Whilst they still need a bit of work, suddenly things are feeling more manageable. I am trying to focus on what I have done so far (a lot) rather than concentrating on what still needs to be done (a lot, too!). As long as I don't panic, I should be OK. I am still unsure about the potential impact of my family situation on my deadlines but I'm determined to take it one day at a time.

4 May 1997:

I began drafting up the results section: qualitative analysis only. There is so much material, so much I want to include that I cannot imagine how I am going to condense it all. The task feels daunting and I am anxious that the amount of thinking and preparation I put into the method section will not be reflected in how I write up my results.

12 May 1997:

Continuing to write up qualitative results. Actually, this has not proved as hard as I had feared, given that in fact, all the analyses had been done previously! So why am I panicking? I am planning to hand a draft of this section into Margie on Thursday.

13 May 1997:

I have had responses from several trainee counsellors who have decided not to participate in the study given that they are all in the process of exams. I can't imagine that I'll get very many now which is a big disappointment. I wonder what I could have done differently to get them involved sooner. A visit perhaps?

15 May 1997:

Had excellent tutorial with Margie, going over the stats and renewing my acquaintance with SPSS! I MUST STOP PANICKING!!! When I stop getting in a state, everything is so much easier and I really find myself getting absorbed in my data. There's a lot of interesting stuff coming out of it, I think.

Margie and I have begun to talk about developing my research ideas in this area beyond the dissertation. I would really like to do this, although it seems a bit premature to be thinking about this at this stage. But I'm determined to keep building on my research skills and experience when I finish the training. I suppose thoughts like this are partly a consequence of researching this area.

4 June 1997:

Time is slipping away, but for the first time, I feel as though I have a good chance of finishing in time. My family situation is more stable now. In terms of my work, the quantitative section is pretty much done and I'm in the process of drafting this section up, as well as the discussion. I can't believe, however, that there's only six weeks to go.

8 June 1997:

I take it all back. I'm now feeling overwhelmed by the stats, which I needed to do some more on. I feel doubtful about my level of statistical knowledge. I have also had to do some rethinking about what I thought had been 'facts' I had acquired during my undergraduate training. The papers Margie lent me on statistical

power, 1- vs 2-tailed testing and the criteria for parametric tests have made me revisit what I thought I knew which, although important in the long-term feels extremely uncomfortable right now!

19 June 1997:

I am continuing to plough through the statistical analyses, which have raised a great deal of questions, given that my samples are small. I have been doing a lot of talking with Margie and others, including seeking additional advice from a statistician. He has advised that the stats I'm using are basically sound. However, what has really struck me is that once again, I am having to make choices about my data and how I wish to analyse them.

I realise now that when I started this study, I had probably under-estimated the amount of interpretation and choices that I would need to do during the statistical analysis. I had certainly been preoccupied with these issues for the qualitative analysis but had not thought about (or maybe not had enough experience of) the interpretation and decision-making that was involved in statistical analysis at this level. Perhaps, therefore, I have also been guilty of dichotomising qualitative and quantitative methods in a way that I find myself feeling so critical of in some of the existing literature.

What has partly been so fascinating (as well as difficult!) about analysing the data from the study as a whole, is seeing not just differences between qualitative and quantitative methods but also areas of complementarity and even similarity that I had not predicted.

4 July 1997:

Independence day! A good point to end my diary as well as the dissertation, as I have now completed the final draft. As I re-read what I've written over the last fifteen months in my diary alone, I realise how far I've come and just how much work I've put in to this study. So, where I am now, in relation to this area of research?

I have so many feelings about the study: positive feelings about completing it and feeling a sense of achievement as well as more negative feelings about difficulties with recruiting counselling trainees and unresolved questions concerning the mixed reactions I received from some of the stage 2 participants.

The range of attitudes and beliefs about the role of theory and research has caused me to reconsider where I place myself on this continuum. The different definitions of the scientist-practitioner model and

formulation have caused me to think about my own personal definitions of these models and my beliefs about their values and limitations. Thinking about where I place myself on the scientist-practitioner continuum in particular has helped me put my own ideas and beliefs in a framework that allows me to think about my own place as a clinician amongst other clinicians.

At the moment, it's still not quite over. Until I've handed in the final version, the separation will not be truly complete. I feel like I can't yet stand back from it to review it more objectively. This, I know, will come - but in a month or so when I have had some space from the work, the results, the energy involved in writing it up and my own fatigue. Overall, however, I think the most important feeling I am left with is the extraordinary experience of having had the opportunity to interview people whom I respect, about their work and the privilege of coming into contact with colleagues at a level that will never happen again.

By way of summary, my own research has caused me to reflect at a different level about how I see my role as a clinician and what I want to achieve as a qualified member of the profession. I sincerely hope that what I have gained from this process is something I can carry with me for the rest of my career. Perhaps, ultimately, this is what the spirit of the scientist-practitioner model is really all about.